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	¾	.815	.835	1.030	1.050	6	175	70	850	375
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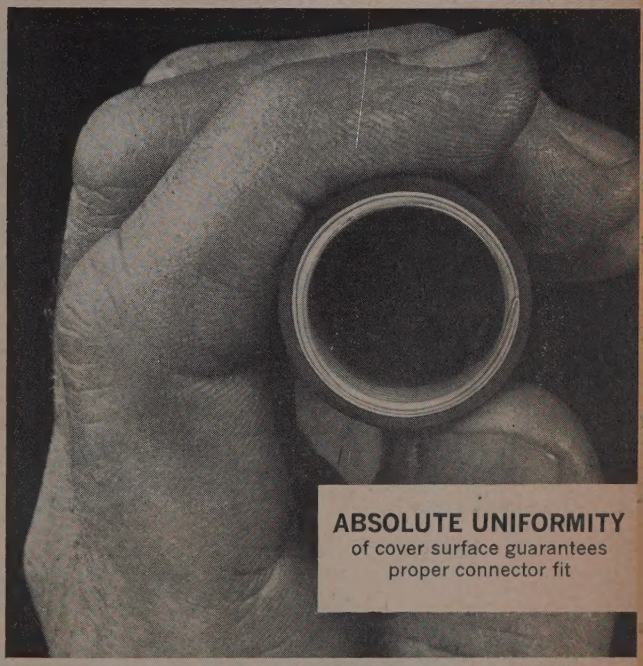

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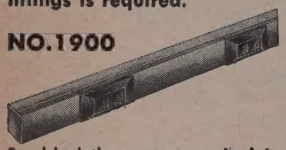
WIREMOLD® SURFACE METAL RACEWAYS

THE WIREMOLD COMPANY • DEPT. E1-9A, HARTFORD 10, CONNECTICUT

PLUGMOLD® Multi-Outlet Systems

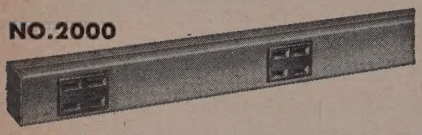
Cover a wide range of electrical outlet requirements — for new construction or rewiring jobs. Mount on any surface . . . walls, work benches, counters, displays, etc. A minimum of fittings is required.

NO.1900



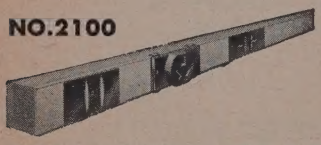
Furnished three ways: unwired (space outlets as desired); factory-wired sections (for short runs); and prewired Snapicoil (outlets on various centers).

NO.2000



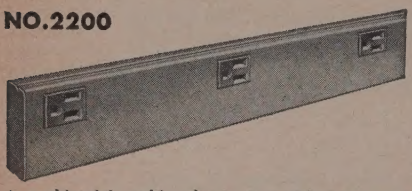
One size raceway accepts five types of outlets — 2-and 3-wire duplex, grounding (A.S.A. Standard) 2-and 3-wire single-circuit, and 3-wire two-circuit.

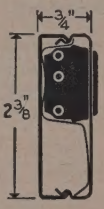
NO.2100



Furnished unwired (space outlets as desired). Receptacles available include 2-wire, 2- and 3-wire grounding, lumiline single, midget twistlock, 3-wire polarized, 3-wire polarized grounding, and T-slot.

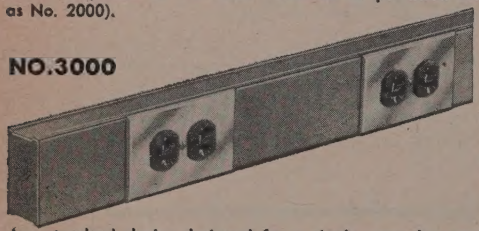
NO.2200

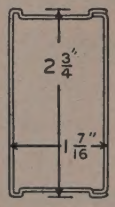




A combination multi-outlet system, wiring raceway and steel baseboard. Same receptacles as No. 2000. Furnished as pre-wired Snapicoil (same as No. 2000).

NO.3000





Any standard device designed for a single gang box can be installed wherever needed within the raceway. Standard flush plates are used.

CAPACITY (for wire types T, TW, RU)

PLUGMOLD		CONDUCTOR SIZE NO. 6	NO. 8	NO. 10	NO. 12	NO. 14
NO. 1900	with devices	—	—	—	3	3
	no devices	—	—	—	3	3
NO. 2000	with devices	—	—	—	3	3
	no devices	—	—	—	3	3
NO. 2100	with devices: consult Wiremold Catalog No. 22					
	no devices	5	8	10	14	17
NO. 2200	with devices	3	7	10	10	10
	no devices	5	8	10	10	10
NO. 3000	with devices	10	10	10	10	10
	no devices	14	16	20	42	56

WIREMOLD® Surface Wiring Raceways

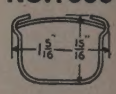
Used along ceilings and walls — to modernize existing wiring, or complete new wiring from panel box to outlets. A minimum of fittings is needed. Four sizes; furnished as one-piece raceways.

NO.200

NO.500

NO.700

NO.1000



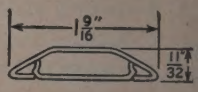
CAPACITY (for wire types T, TW, RU)

WIREMOLD	CONDUCTOR SIZE NO. 6	NO. 8	NO. 10	NO. 12	NO. 14
NO. 200	—	—	—	3	3
NO. 500	—	2	3	4	5
NO. 700	—	3	5	6	8
NO. 1000	5	8	8	10	10

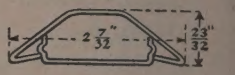
PANCAKE® Overfloor Duct Systems

Strong, flat overfloor raceways to carry power and light and communications wiring to locations away from walls. Quickly installed without channeling into floors. A minimum of fittings is needed.

NO. 1500



NO. 2600

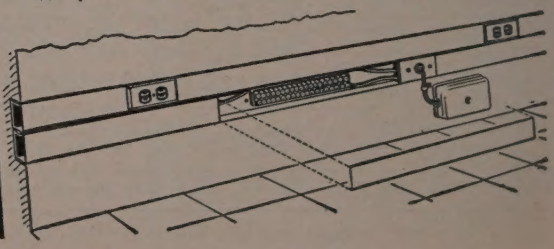


CAPACITY (for wire types T, TW, RU)

PANCAKE	CONDUCTOR SIZE NO. 6	NO. 8	NO. 10	NO. 12	NO. 14
NO. 1500	—	4	4	6	8
NO. 2600	4	7	8	10	10

TELE-POWER Duct Systems

Consist of a pair of parallel Plugmold Raceways — one for telephone, signal and inter-office communications wiring; the other a multi-outlet system for power and light wiring. Because each raceway has a separate cover, the electrical contractor or telephone installer needs only install or remove the cover for the wiring that concerns him. The high and low potential wiring are not exposed to each other.



TECHNICAL DATA

GRAPHICAL SYMBOLS

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GRAPHICAL SYMBOLS FOR ARCHITECTURAL PLANS

Ceiling	Wall	GENERAL OUTLETS
O	-O	Outlet
B	-B	Blanked Outlet
D		Drop Cord
E	-E	Electric Outlet; for use only when circle used alone might be confused with columns, plumbing symbols, etc
F	-F	Fan Outlet
J	-J	Junction Box
L	-L	Lamp Holder
L_{PS}	$-L_{PS}$	Lamp Holder with Pull Switch
S	-S	Pull Switch
V	-V	Outlet for Vapor Discharge Lamp
X	-X	Exit Light Outlet
C	-C	Clock Outlet (Specify Voltage)

CONVENIENCE OUTLETS

	Duplex Convenience Outlet
$_{1,3}$	Convenience Outlet other than Duplex 1=Single, 3=Triplex, etc
$_{WP}$	Weatherproof Convenience Outlet
$_{R}$	Range Outlet
$_{S}$	Switch and Convenience Outlet
R	Radio and Convenience Outlet
	Special Purpose Outlet (Des. in Spec.)
	Floor Outlet

SWITCH OUTLETS

S	Single Pole Switch
S_2	Double Pole Switch
S_3	Three Way Switch
S_4	Four Way Switch
S_D	Automatic Door Switch
S_E	Electrolier Switch
S_K	Key Operated Switch
S_P	Switch and Pilot Lamp
S_{CB}	Circuit Breaker
S_{WCB}	Weatherproof Circuit Breaker
S_{MC}	Momentary Contact Switch
S_{RC}	Remote Control Switch
S_{WP}	Weatherproof Switch
S_F	Fused Switch
S_{WF}	Weatherproof Fused Switch

SPECIAL OUTLETS

$O_{a,b,c,etc}$
$_{a,b,c,etc}$
$S_{a,b,c,etc}$

Any standard symbol as given above with the addition of a lower case subscript letter may be used to designate some special variation of standard equipment of particular interest in a specific set of architectural plans.

When used they must be listed in the Key of Symbols on each drawing and if necessary further described in the specifications.

PANELS, CIRCUITS, AND MISCELLANEOUS

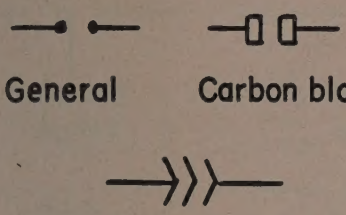
- Lighting Panel
- Power Panel
- Branch Circuit; Concealed in Ceiling or Wall
- Branch Circuit; Concealed in Floor
- Branch Circuit; Exposed
- Home Run to Panel Board. Indicate number of circuits by number of arrows. Note: Any circuit without further designation indicates a two-wire circuit. For a greater number of wires indicate as follows: -//- (3 wires) -///- (4 wires), etc.
- Feeders. Note: Use heavy lines and designate by number corresponding to listing in Feeder Schedule.
- Underfloor Duct and Junction Box. Triple System. Note: For double or single systems eliminate one or two lines. This symbol is equally adaptable to auxiliary system layouts.
- G Generator
- M Motor
- I Instrument
- T Power Transformer (Or draw to scale.)
- Controller
- Isolating Switch

AUXILIARY SYSTEMS

- Pushbutton
- Buzzer
- Bell
- Annunciator
- Outside Telephone
- Interconnecting Telephone
- Telephone Switchboard
- T Bell-Ringing Transformer
- D Electric Door Opener
- F Fire Alarm Bell
- F Fire Alarm Station
- City Fire Alarm Station
- FA Fire Alarm Central Station
- FS Automatic Fire Alarm Device
- W Watchman's Station
- W Watchman's Central Station
- H Horn
- N Nurse's Signal Plug
- M Maid's Signal Plug
- R Radio Outlet
- SC Signal Central Station
- Interconnection Box
- Battery
- Auxiliary System Circuits. Note: Any line without further designation indicates a 2-wire system. For a greater number of wires designate with numerals in manner similar to —·— 12-No. 18W-3/4"C., or designate by number corresponding to listing in Schedule.
- $_{a,b,c}$ Special Auxiliary Outlets. Subscript letters refer to notes on plans or detailed description in specifications.

GRAPHICAL SYMBOLS FOR POWER AND CONTROL

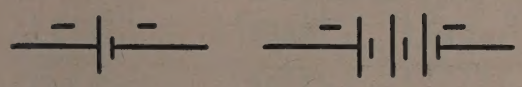
ARRESTERS



General — Carbon block

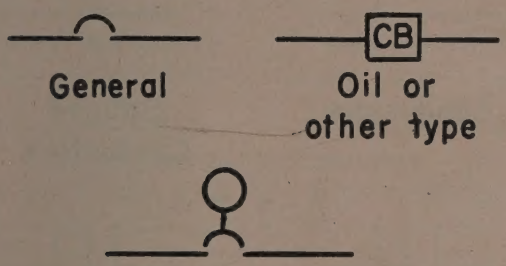
Electrolytic

BATTERIES



Single Cell — Multiple Cell

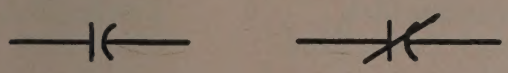
CIRCUIT BREAKERS



General — Oil or other type

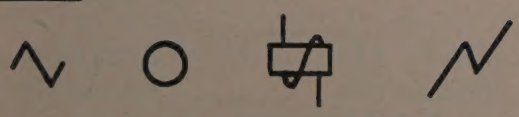
Motor-operated

CAPACITORS



General — Variable

COILS



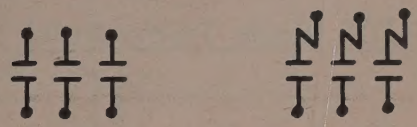
Operating — Blowout

CONTACTS

Normally Open — Normally Closed

Mating Connectors

CONTACTORS

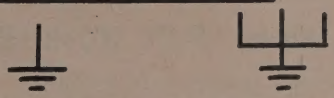


3-pole — 3-pole with blowout coils

FUSES

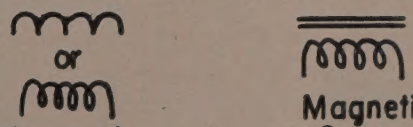
General

GROUND CONNECTION

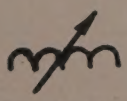


Single Conductor — Several Conductors

INDUCTORS

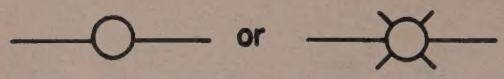


General — Magnetic Core

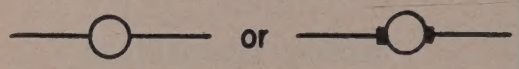


Variable

LAMPS



MACHINES, ROTATING

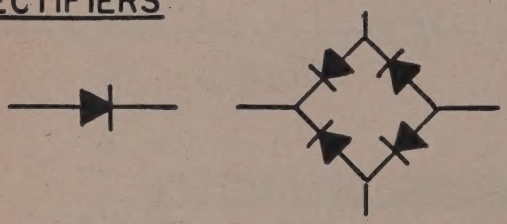


Motors, Generators, etc.

POTHEADS (Cable Terminators)

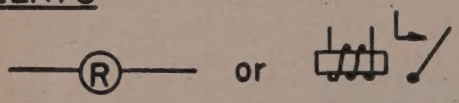
Single Conductor — Several Conductors

RECTIFIERS

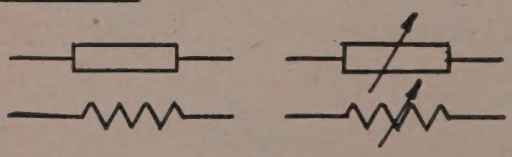


Half Wave — Full Wave (Bridge)

RELAYS

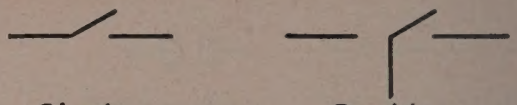


RESISTORS

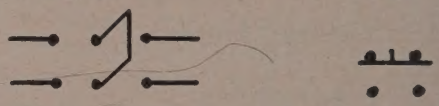


Fixed — Variable

SWITCHES

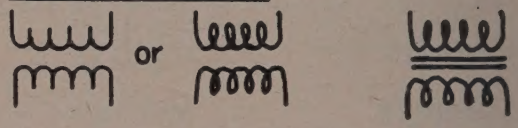


Single Throw — Double Throw



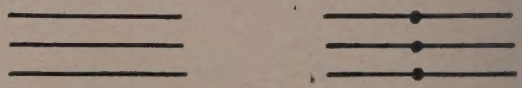
Knife — Pushbutton

TRANSFORMERS

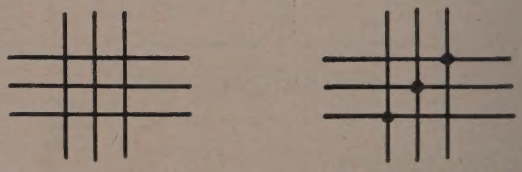


General — With Core

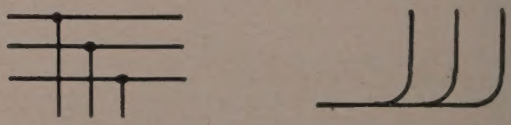
WIRING



Conductors — Spliced Conductors



Crossing of conductors, not connected — Crossing of conductors, connected



Joining of conductors, not crossing — Grouping of conductors

Table 1. Maximum Number of Conductors in Conduit or Tubing

Types RF-2, RFH-2, R, RH, RW, RH-RW, RHW, RHH, RU, RUH, RUW, SF and SFF Types TF, T, TW and THW

Size AWG or MCM	Maximum Number of Conductors in Conduit or Tubing (Based upon % conductor fill, Table 3, Ch. 10, for new work)											
	½ In.	¾ In.	1 In.	1¼ In.	1½ In.	2 In.	2½ In.	3 In.	3½ In.	4 In.	5 In.	6 In.
18	7	12	20	35	49	80	115	176				
16	6	10	17	30	41	68	98	150				
14	4	6	10	18	25	41	58	90	121	155		
12	3	5	8	15	21	34	50	76	103	132	208	
10	1	4	7	13	17	29	41	64	86	110	173	
8	1	3	4	7	10	17	25	38	52	67	105	152
6	1	1	3	4	6	10	15	23	32	41	64	93
4	1	1	1	3	5	8	12	18	24	31	49	72
3		1	1	3	4	7	10	16	21	28	44	63
2		1	1	3	3	6	9	14	19	24	38	55
1		1	1	1	3	4	7	10	14	18	29	42
0			1	1	2	4	6	9	12	16	25	37
00			1	1	1	3	5	8	11	14	22	32
000			1	1	1	3	4	7	9	12	19	27
0000				1	1	2	3	6	8	10	16	23
250				1	1	1	3	5	6	8	13	19
300				1	1	1	3	4	5	7	11	16
350				1	1	1	1	3	5	6	10	15
400					1	1	1	3	4	6	9	13
500					1	1	1	3	4	5	8	11
600						1	1	1	3	4	6	9
700						1	1	1	3	3	6	8
750						1	1	1	3	3	5	8
800						1	1	1	2	3	5	7
900						1	1	1	1	3	4	7
1000						1	1	1	1	3	4	6
1250							1	1	1	1	3	5
1500								1	1	1	3	4
1750								1	1	1	2	4
2000								1	1	1	1	3

Table 3: Combination of Conductors

For groups or combinations of conductors not included in Table 1, it is recommended that the conduit or tubing be of such size that the sum of the cross-sectional areas of the individual conductors will not be more than the percentage of the interior cross-sectional area of the conduit or tubing shown in the following table:

Per Cent Area of Conduit or Tubing

	Number of Conductors				
	1	2	3	4	Over 4
Conductors (not lead covered)	53	31	43	40	40
Lead-covered conductors . . .	55	30	40	38	35
For rewiring existing raceways for increased load where it is impracticable to increase the size of the raceway due to structural conditions.	60	40	50	50	50

See Note to Table 5 for size of conduit or tubing for combinations of conductors not shown in Table 1.

Full Load Currents (Amperes)

Table 430-147: DC Motors

HP	115V	230V	550V
¼	3.	1.5	..
⅓	3.8	1.9	..
½	5.4	2.7	..
¾	7.4	3.7	1.6
1	9.6	4.8	2.0
1½	13.2	6.6	2.7
2	17	8.5	3.6
3	25	12.5	5.2
5	40	20	8.3
7½	58	29	12
10	76	38	16
15	112	56	23
20	148	74	31
25	184	92	38
30	220	110	46
40	292	146	61
50	360	180	75
60	430	215	90
75	536	268	111
100		355	148
125		443	184
150		534	220
200		712	295

These values of full-load currents are for motors running at usual speed.

Table 430-148: 1-Phase AC Motors

HP	115V	230V	440V
⅙	4.4	2.2	..
¼	5.8	2.9	..
⅓	7.2	3.6	..
½	9.8	4.9	..
¾	13.8	6.9	..
1	16	8	..
1½	20	10	..
2	24	12	..
3	34	17	..
5	56	28	..
7½	80	40	21
10	100	50	26

These values of full-load currents are for motors running at usual speeds and motors with normal torque characteristics. Motors built for especially low speeds or high torques may have higher full-load currents, in which case the nameplate current ratings should be used.

To obtain full-load currents of 208 and 200-volt motors, increase corresponding 230-volt motor full-load currents by 10 and 15 per cent, respectively.

Table 430-150: 3-Phase AC Motors

	Induction Type Squirrel-Cage and Wound Rotor Amperes					Synchronous Type †Unity Power Factor Amperes			
HP	110V	220V	440V	550V	2300V	220V	440V	550V	2300V
½	4	2	1	.8					
¾	5.6	2.8	1.4	1.1					
1	7	3.5	1.8	1.4					
1½	10	5	2.5	2.0					
2	13	6.5	3.3	2.6					
3		9	4.5	4					
5		15	7.5	6					
7½		22	11	9					
10		27	14	11					
15		40	20	16					
20		52	26	21					
25		64	32	26	7	54	27	22	5.4
30		78	39	31	8.5	65	33	26	6.5
40		104	52	41	10.5	86	43	35	8
50		125	63	50	13	108	54	44	10
60		150	75	60	16	128	64	51	12
75		185	93	74	19	161	81	65	15
100		246	123	98	25	211	106	85	20
125		310	155	124	31	264	132	106	25
150		360	180	144	37		158	127	30
200		480	240	192	48		210	168	40

For full-load currents of 208 and 200-volt motors, increase the corresponding 220-volt motor full-load current by 6 and 10 per cent, respectively.

These values of full-load current are for motors running at speeds usual for belted motors and motors with normal torque characteristics. Motors built for especially low speeds or high torques may require more running current, in which case the nameplate current rating should be used.

†For 90 and 80 per cent P.F. the above figures should be multiplied by 1.1 and 1.25 respectively.

Table 4 – Dimensions and Per Cent Area of Conduit and of Tubing

Areas of Conduit or Tubing for the Combinations of Wires Permitted in Table 3

Trade Size	Internal Diameter Inches	Area – Square Inches										
		Total 100%	Not Lead Covered				Lead Covered				
			1 Cond. 53%	2 Cond. 31%	3 Cond. 43%	4 Cond. and Over 40%	1 Cond. 55%	2 Cond. 30%	3 Cond. 40%	4 Cond. 38%	Over 4 Cond. 35%
½	.622	.30	.16	.09	.13	.12	.17	.09	.12	.11	.11
¾	.824	.53	.28	.16	.23	.21	.29	.16	.21	.20	.19
1	1.049	.86	.46	.27	.37	.34	.47	.26	.34	.33	.30
1¼	1.380	1.50	.80	.47	.65	.60	.83	.45	.60	.57	.53
1½	1.610	2.04	1.08	.63	.88	.82	1.12	.61	.82	.78	.71
2	2.067	3.36	1.78	1.04	1.44	1.34	1.85	1.01	1.34	1.28	1.18
2½	2.469	4.79	2.54	1.48	2.06	1.92	2.63	1.44	1.92	1.82	1.68
3	3.068	7.38	3.91	2.29	3.17	2.95	4.06	2.21	2.95	2.80	2.58
3½	3.548	9.90	5.25	3.07	4.26	3.96	5.44	2.97	3.96	3.76	3.47
4	4.026	12.72	6.74	3.94	5.47	5.09	7.00	3.82	5.09	4.83	4.45
5	5.047	20.00	10.60	6.20	8.60	8.00	11.00	6.00	8.00	7.60	7.00
6	6.065	28.89	15.31	8.96	12.42	11.56	15.89	8.67	11.56	10.98	10.11

Table 5 – Dimensions of Rubber-Covered and Thermoplastic-Covered Conductors

Size AWG MCM	Types RF-2, RFH-2, R, RH, RHH, RHW, RH-RW, RW THW		Types TF, T, TW, RU**, RUH**, RUW	
	Approx. Diam. Inches	Approx. Area Sq. Ins.	Approx. Diam. Inches	Approx. Area Sq. Ins.
18	.146	.0167	.106	.0088
16	.158	.0196	.118	.0109
14	2/64 in. .171	.0230	.131	.0135
14	3/64 in. .204*	.0327*		
12	2/64 in. .188	.0278	.148	.0172
12	3/64 in. .221*	.0384*		
10	.242	.0460	.168	.0224
8	.311	.0760	.228	.0408
6	.397	.1238	.323	.0819
4	.452	.1605	.372	.1087
3	.481	.1817	.401	.1263
2	.513	.2067	.433	.1473
1	.588	.2715	.508	.2027
0	.629	.3107	.549	.2367
00	.675	.3578	.595	.2781
000	.727	.4151	.647	.3288
0000	.785	.4840	.705	.3904
250	.868	.5917	.788	.4877
300	.933	.6837	.843	.5581
350	.985	.7620	.895	.6291
400	1.032	.8365	.942	.6969
500	1.119	.9834	1.029	.8316
600	1.233	1.1940	1.143	1.0261
700	1.304	1.3355	1.214	1.1575
750	1.339	1.4082	1.249	1.2252
800	1.372	1.4784	1.282	1.2908
900	1.435	1.6173	1.345	1.4208
1000	1.494	1.7531	1.404	1.5482
1250	1.676	2.2062	1.577	1.9532
1500	1.801	2.5475	1.702	2.2748
1750	1.916	2.8895	1.817	2.5930
2000	2.021	3.2079	1.922	2.9013

*The dimensions of Type RW, RHH and THW wire. Also, these dimensions to be used for new work in computing size of conduit or tubing for combinations of wires not shown in Table 1.

** No. 14 to No. 2.

No. 18 to No. 8, solid; No. 6 and larger, stranded.

The dimensions of rubber-covered conductors in column 3 of this table are to be used in computing the size of conduit or tubing for new work for combinations not shown in Table 1. The dimensions in the last column of this table may be used only for rewiring existing raceways.

Table 6 – Dimensions of Lead-Covered Conductors

Types RL, RHL, and RUL

Size AWG MCM	Single Conductor		Two Conductor		Three Conductor	
	Diam. Inches	Area Sq. Ins.	Diam. Inches	Area Sq. Ins.	Diam. Inches	Area Sq. Ins.
14	.28	.062	.28 x .47	.115	.59	.273
12	.29	.066	.31 x .54	.146	.62	.301
10	.35	.096	.35 x .59	.180	.68	.363
8	.41	.132	.41 x .71	.255	.82	.528
6	.49	.188	.49 x .86	.369	.97	.738
4	.55	.237	.54 x .96	.457	1.08	.916
2	.60	.283	.61 x 1.08	.578	1.21	1.146
1	.67	.352	.70 x 1.23	.756	1.38	1.49
0	.71	.396	.74 x 1.32	.859	1.47	1.70
00	.76	.454	.79 x 1.41	.980	1.57	1.94
000	.81	.515	.84 x 1.52	1.123	1.69	2.24
0000	.87	.593	.90 x 1.64	1.302	1.85	2.68
250	.98	.754	.....		2.02	3.20
300	1.04	.85	.....		2.15	3.62
350	1.10	.95	.....		2.26	4.02
400	1.14	1.02	.....		2.40	4.52
500	1.23	1.18	.....		2.59	5.28

Note – No. 14 to No. 8, solid conductors; No. 6 and larger, stranded conductors. Data for 2/64-inch insulation not yet compiled.

Varnished-Cambric Insulated Conductors

Type V

The insulation thickness for varnished-cambric conductors, Type V, is the same as for rubber-covered conductors, Type R, except for Nos. 14 and 12 which have 3/64-inch insulation for varnished-cambric, and 2/64-inch insulation for rubber-covered conductors and for No. 8 which has 3/64-inch insulation for varnished-cambric, and 4/64-inch insulation for rubber-covered conductors. Tables 1 and 2 may, therefore, be used for the number of varnished-cambric insulated conductors in a conduit or tubing.

Note: The above tables give the nominal size of conductors and conduit or tubing recommended for use in computing size of conduit or tubing for various combinations of conductors. The dimensions represent average conditions only, and while variations will be found in dimensions of conductors and conduits of different manufacture, these variations will not affect the computation.

Table 430-152. Maximum Rating or Setting of Motor-Branch-Circuit Protective Devices for Motors Marked with a Code Letter Indicating Locked Rotor KVA

Type of Motor	Per Cent of Full-Load Current		
	Fuse Rating See also Table 430-146, Columns 4, 5, 6, 7)	Circuit-Breaker Setting	
		Instantaneous Type	Time Limit Type
All AC single-phase and polyphase squirrel cage and synchronous motors with full-voltage, resistor or reactor starting:			
Code Letter A	150	.....	150
Code Letter B to E	250	.....	200
Code Letter F to V	300	.....	250
All AC squirrel cage and synchronous motors with auto-transformer starting:			
Code Letter A	150	.....	150
Code Letter B to E	200	.....	200
Code Letter F to V	250	.....	200

Synchronous motors of the low-torque, low-speed type (usually 450 RPM or lower), such as are used to drive reciprocating compressors, pumps, etc., which start up unloaded. do not require a fuse rating or circuit-breaker settingin excess of 200 per cent of full-load current.

Table 430-153. Maximum Rating or Setting of Motor-Branch-Circuit Protective Devices for Motors not Marked with a Code Letter Indicating Locked Rotor KVA

Type of Motor	Per Cent of Full-Load Current		
	Fuse Rating (See also Table 430-146, Columns 4, 5, 6, 7	Circuit-Breaker Setting	
		Instantaneous Type	Time Limit Type
1-phase, all types	300	.....	250
Squirrel-cage and synchronous (full-voltage, resistor and reactor starting)	300	.....	250
Squirrel-cage and synchronous (auto-transformer starting) Not more than 30 amperes.....	250	.....	200
More than 30 amperes	200	.....	200
High-reactance squirrel-cage Not more than 30 amperes	250	.....	250
More than 30 amperes	200	.....	200
Wound-rotor	150	.....	150
Direct-current Not more than 50 H.P.	150	250	150
More than 50 H.P.	150	175	150

Table 430-7(b). Locked Rotor Indicating Code Letters

Code Letter	Kilovolt-Amperes per Horsepower with Locked Rotor
A	0 — 3.14
B	3.15 — 3.54
C	3.55 — 3.99
D	4.0 — 4.49
E	4.5 — 4.99
F	5.0 — 5.59
G	5.6 — 6.29
H	6.3 — 7.09
J	7.1 — 7.99
K	8.0 — 8.99
L	9.0 — 9.99
M	10.0 — 11.19
N	11.2 — 12.49
P	12.5 — 13.99
R	14.0 — 15.99
S	16.0 — 17.99
T	18.0 — 19.99
U	20.0 — 22.39
V	22.4 — and up

The above table is an adopted standard of the National Electrical Manufacturers Association.

The code letter indicating motor input with locked rotor must be in an individual block on the nameplate, properly designated. This code letter is to be used for determining branch circuit overcurrent protection by reference to Table 430-152.

Table 710-37: Isolation by Elevation

Distance of Live Parts Above the Floor or Other Working Surface

Voltage Between Phases	Minimum Vertical Clearance of Unguarded Parts Feet	Inches
601	8	0
2300	8	0
6600	8	0
11000	9	0
22000	9	3
33000	9	6
44000	9	10
66000	10	5
88000	11	0
110000	11	7
132000	12	2

Table 710-38: Working Space

Minimum Clear Space Adjacent to Live Parts

Voltage Between Phases	Minimum Horizontal Clearance of Unguarded Parts Feet	Inches
601	3	2
2300	3	3
6600	3	4
11000	3	6
22000	3	9
33000	4	0
44000	4	4
66000	4	11
88000	5	6
110000	6	1
132000	6	8

MAXIMUM NUMBER OF CONDUCTORS IN BOXES

Table 370-6(a-1): Deep Boxes

Box Dimensions Trade Size	Maximum Number of Conductors No. 14	No. 12	No. 10	No. 8
1 1/2 x 3 1/4 octagonal.....	5	5	4	0
1 1/2 x 4 octagonal	8	7	6	5
1 1/4 x 4 square	9	7	6	4
1 1/2 x 4 square	11	9	7	5
1 1/2 x 4 11/16 square	16	12	10	8
2 1/8 x 4 11/16 square	20	16	12	10
2 x 1 3/4 x 2 3/4.....	5	4	4	
2 1/2 x 1 3/4 x 2 3/4.....	6	6	5	
3 x 1 3/4 x 2 3/4.....	7	7	6	

Where there is not sufficient space for a deeper box, four No. 14 AWG conductors may enter a box provided with cable clamps and containing one or more devices on a single mounting strap.

Table 370-6(a-2): Shallow Boxes (Less than 1½" Depth)

Box Dimensions Trade Size	Maximum Number of Conductors No. 14	No. 12	No. 10
3 1/4.....	4	4	3
4	6	6	4
4 11/16.....	8	6	6

The above tables apply where no fittings or devices, such as fixture studs, cable clamps, hickeys, switches or receptacles are contained in the box. Where one or more fixture studs, cable clamps, or hickeys are contained in the box, the number of conductors shall be one less than shown in the tables with a further deduction of one conductor for one or several flush devices mounted on the same strap. A conductor running through the box is counted as one conductor and each conductor originating outside the box and terminating inside the box is counted as one conductor. Conductors of which no part leaves the box are not to be counted in the above computation. If single flush boxes are ganged, and each section is occupied by a flush device or combination of flush devices on the same strap, the limitations will apply to each section individually.

Table 370-6(b): Other Combinations

Size of Conductor	Free Space Within Box for Each Conductor
No. 14	2. cubic inches
No. 12	2.25 cubic inches
No. 10	2.5 cubic inches
No. 8	3. cubic inches

PROTECTIVE DEVICES FOR RUNNING OVERLOAD PROTECTION AND BRANCH CIRCUIT PROTECTION

(Based on Rated Full-load Motor Current)
Table 430–146

Col. No. 1	2	3	4		5		6		7	
	For Running Protection of Motors		Maximum Allowable Rating or Setting of Branch Circuit Protective Devices							
			WITH CODE LETTERS Single-phase squirrel cage and synchronous. Full voltage, resistor or reactor starting, Code letters F to V inclusive.		WITH CODE LETTERS Single-phase, squirrel cage and synchronous. Full voltage, resistor, or reactor start, Code letters B to E inclusive. Auto transformer start, Code letters F to V inclusive.		WITH CODE LETTERS Squirrel cage and synchronous auto transformer start, Code letters B to E inclusive.		WITH CODE LETTERS All motors code letter A.	
			WITHOUT CODE LETTERS Same as above.		WITHOUT CODE LETTERS (Not more than 30 Amperes) Squirrel cage and synchronous, auto transformer start, high reactance squirrel cage.		WITHOUT CODE LETTERS (More than 30 Amperes) Squirrel cage and synchronous, auto transformer start, high reactance squirrel cage.		WITHOUT CODE LETTERS DC and wound rotor motors.	
Full load current rating of motor amperes	Maximum rating of non-adjustable protective devices. Amperes	Maximum setting of adjustable protective devices. Amperes	Fuses	Circuit Breakers (Non-adjustable Overload Trip)	Fuses	Circuit Breakers (Non-adjustable Overload Trip)	Fuses	Circuit Breakers (Non-adjustable Overload Trip)	Fuses	Circuit Breakers (Non-adjustable Overload Trip)
1	2	1.25	15	15	15	15	15	15	15	15
2	3	2.50	15	15	15	15	15	15	15	15
3	4	3.75	15	15	15	15	15	15	15	15
4	6	5.0	15	15	15	15	15	15	15	15
5	8	6.25	15	15	15	15	15	15	15	15
6	8	7.50	20	15	15	15	15	15	15	15
7	10	8.75	25	20	20	15	15	15	15	15
8	10	10.0	25	20	20	20	20	20	15	15
9	12	11.25	30	30	25	20	20	20	15	15
10	15	12.50	30	30	25	20	20	20	15	15
11	15	13.75	35	30	30	30	25	30	20	20
12	15	15.00	40	30	30	30	25	30	20	20
13	20	16.25	40	40	35	30	30	30	20	20
14	20	17.50	45	40	35	30	30	30	25	30
15	20	18.75	45	40	40	30	30	30	25	30
16	20	20.00	50	40	40	40	35	40	25	30
17	25	21.25	60	50	45	40	35	40	30	30
18	25	22.50	60	50	45	40	40	40	30	30
19	25	23.75	60	50	50	40	40	40	30	30
20	25	25.00	60	50	50	40	40	40	30	30
22	30	27.50	70	70	60	50	45	50	35	40
24	30	30.00	80	70	60	50	50	50	40	40
26	35	32.50	80	70	70	70	60	70	40	40
28	35	35.00	90	70	70	70	60	70	45	50
30	40	37.50	90	100	80	70	60	70	45	50
32	40	40.00	100	100	80	70	70	70	50	50
34	45	42.50	110	100	90	70	70	70	60	70
36	45	45.00	110	100	90	100	80	100	60	70
38	50	47.50	125	100	100	100	80	100	60	70
40	50	50.00	125	100	100	100	80	100	60	70
42	50	52.50	125	125	110	100	90	100	70	70
44	60	55.00	125	125	110	100	90	100	70	70
46	60	57.50	150	125	125	100	100	100	70	70
48	60	60.00	150	125	125	100	100	100	80	100
50	60	62.50	150	125	125	100	100	100	80	100
52	70	65.00	175	150	150	125	110	125	80	100
54	70	67.50	175	150	150	125	110	125	90	100
56	70	70.00	175	150	150	125	125	125	90	100
58	70	72.50	175	150	150	125	125	125	90	100
60	80	75.00	200	150	150	125	125	125	90	100
62	80	77.50	200	175	175	125	125	125	100	100
64	80	80.00	200	175	175	150	150	150	100	100
66	80	82.50	200	175	175	150	150	150	100	100
68	90	85.00	225	175	175	150	150	150	110	125
70	90	87.50	225	175	175	150	150	150	110	125
72	90	90.00	225	200	200	150	150	150	110	125
74	90	92.50	225	200	200	150	150	150	125	125
76	100	95.00	250	200	200	175	175	175	125	125
78	100	97.50	250	200	200	175	175	175	125	125
80	100	100.00	250	200	200	175	175	175	125	125
82	110	102.50	250	225	225	175	175	175	125	125
84	110	105.00	250	225	225	175	175	175	150	150
86	110	107.50	300	225	225	175	175	175	150	150
88	110	110.00	300	225	225	200	200	200	150	150
90	110	112.50	300	225	225	200	200	200	150	150
92	125	115.00	300	250	250	200	200	200	150	150
94	125	117.50	300	250	250	200	200	200	150	150
96	125	120.00	300	250	250	200	200	200	150	150
98	125	122.50	300	250	250	200	200	200	150	150
100	125	125.00	300	250	250	200	200	200	150	150
105	150	131.50	350	300	300	225	225	225	175	175
110	150	137.50	350	300	300	225	225	225	175	175
115	150	144.00	350	300	300	250	250	250	175	175
120	150	150.00	400	300	300	250	250	250	200	200
125	175	156.50	400	350	350	250	250	250	200	200
130	175	162.50	400	350	350	300	300	300	200	200
135	175	169.00	450	350	350	300	300	300	225	225
140	175	175.00	450	350	350	300	300	300	225	225
145	200	181.50	450	400	400	300	300	300	225	225
150	200	187.50	450	400	400	300	300	300	225	225
155	200	194.00	500	400	400	350	350	350	250	250
160	200	200.00	500	400	400	350	350	350	250	250
165	225	206.00	500	500	450	350	350	350	250	250
170	225	213.00	500	500	450	350	350	350	300	300
175	225	219.00	600	500	450	350	350	350	300	300
180	225	225.00	600	500	450	400	400	400	300	300
185	250	231.00	600	500	500	400	400	400	300	300
190	250	238.00	600	500	500	400	400	400	300	300
195	250	244.00	600	500	500	400	400	400	300	300
200	250	250.00	600	500	500	400	400	400	300	300
210	250	263.00	800	600	600	500	450	500	350	350
220	300	275.00	800	600	600	500	450	500	350	350
230	300	288.00	800	600	600	500	500	500	350	350
240	300	300.00	800	600	600	500	500	500	400	400
250	300	313.00	800	700	800	500	500	500	400	400
260	350	325.00	800	700	800	600	600	600	400	400
270	350	338.00	1000	700	800	600	600	600	450	500
280	350	350.00	1000	700	800	600	600	600	450	500

ALLOWABLE CURRENT-CARRYING CAPACITIES OF INSULATED CONDUCTORS (Amperes)

Not More Than Three Conductors in Raceway or Cable or Direct Burial
(Based on Room Temperature of 30C, 86F)

TABLE 310-12: COPPER

Size AWG MCM	Rubber Type R Type RW Type RU Type RUW (14-2) Type RH-RW* Thermo-plastic Type T Type TW	Rubber Type RH RUH (14-2) Type RH-RW* Type RHW Thermo-plastic Type THW	Paper Thermo-plastic Asbestos Type TA Var-Cam Type V Asbestos Var-Cam Type AVB MI Cable RHH† SA	Asbestos Var-Cam Type AVA Type AVL	Impreg-nated Asbestos Type AI (14-8) Type AIA	Asbestos Type A (14-8) Type AA
14	15	15	25	30	30	30
12	20	20	30	35	40	40
10	30	30	40	45	50	55
8	40	45	50	60	65	70
6	55	65	70	80	85	95
4	70	85	90	105	115	120
3	80	100	105	120	130	145
2	95	115	120	135	145	165
1	110	130	140	160	170	190
0	125	150	155	190	200	225
00	145	175	185	215	230	250
000	165	200	210	245	265	285
0000	195	230	235	275	310	340
250	215	255	270	315	335	.....
300	240	285	300	345	380	.....
350	260	310	325	390	420	.....
400	280	335	360	420	450	.....
500	320	380	405	470	500	.....
600	355	420	455	525	545	.....
700	385	460	490	560	600	.....
750	400	475	500	580	620	.....
800	410	490	515	600	640	.....
900	435	520	555	.....	.....	.....
1000	455	545	585	680	730	.....
1250	495	590	645	.....	.....	.....
1500	520	625	700	785	.....	.....
1750	545	650	735	.....	.....	.....
2000	560	665	775	840	.....	.....

CORRECTION FACTORS, ROOM TEMPS. OVER 30° C. 86° F.

C.	F.						
40	104	.82	.88	.90	.94	.95	.....
45	113	.71	.82	.85	.90	.92	.....
50	122	.58	.75	.80	.87	.89	.....
55	131	.41	.67	.74	.83	.86	.....
60	140	.....	.58	.67	.79	.83	.91
70	158	.....	.35	.52	.71	.76	.87
75	167	.....	.....	.43	.66	.72	.86
80	176	.....	.....	.30	.61	.69	.84
90	194	.....	.....	.....	.50	.61	.80
100	212	.....	.....	.....	.....	.51	.77
120	248	.....	.....	.....	.....	.....	.69
140	284	.....	.....	.....	.....	.....	.59

†The current-carrying capacities for Type RHH conductors for sizes AWG 14, 12 and 10 shall be the same as designated for Type RH conductors in this table.
*See Note 8a.

TABLE 310-14: ALUMINUM

Size AWG MCM	Rubber Type R, RW, RU, RUW (12-2) Type RH-RW** Thermo-plastic Type T, TW	Rubber Type RH RUH (14-2) Type RH-RW** Type RHW Thermo-plastic Type THW	Thermo-plastic Asbestos Type TA Var-Cam Type V Asbestos Var-Cam Type AVB MI Cable RHH† SA	Asbestos Var-Cam Type AVA Type AVL	Impreg-nated Asbestos Type AI (14-8) Type AIA	Asbestos Type A (14-8) Type AA
12	15	15	25	25	30	30
10	25	25	30	35	40	45
8	30	40	40	45	50	55
6	40	50	55	60	65	75
4	55	65	70	80	90	95
3	65	75	80	95	100	115
*2	75	90	95	105	115	130
*1	85	100	110	125	135	150
*0	100	120	125	150	160	180
*00	115	135	145	170	180	200
*000	130	155	165	195	210	225
*0000	155	180	185	215	245	270
250	170	205	215	250	270	.....
300	190	230	240	275	305	.....
350	210	250	260	310	335	.....
400	225	270	290	335	360	.....
500	260	310	330	380	405	.....
600	285	340	370	425	440	.....
700	310	375	395	455	485	.....
750	320	385	405	470	500	.....
800	330	395	415	485	520	.....
900	355	425	455	.....	.....	.....
1000	375	445	480	560	600	.....
1250	405	485	530	.....	.....	.....
1500	435	520	580	650	.....	.....
1750	455	545	615	.....	.....	.....
2000	470	560	650	705	.....	.....

CORRECTION FACTORS, ROOM TEMPS. OVER 30° C. 86° F.

C.	F.						
40	104	.82	.88	.90	.94	.95	.....
45	113	.71	.82	.85	.90	.92	.....
50	122	.58	.75	.80	.87	.89	.....
55	131	.41	.67	.74	.83	.86	
60	140	.....	.58	.67	.79	.83	.91
70	158	.....	.35	.52	.71	.76	.87
75	167	.....	.....	.43	.66	.72	.86
80	176	.....	.....	.30	.61	.69	.84
90	194	.....	.....	.....	.50	.61	.80
100	212	.....	.....	.....	.....	.51	.77
120	248	.....	.....	.....	.....	.....	.69
140	284	.....	.....	.....	.....	.....	.59

*For three wire, single phase service and sub-service circuits, the allowable current-carrying capacity of RH, Rh-RW, Rhh and RHW aluminum conductors shall be for sizes #2-100 Amp., #1-110 Amp., #1/0-125 Amp., #2/0-150 Amp., #3/0-170 Amp. and #4/0-200 Amp.
†The current-carrying capacities for Type RHH conductors for sizes AWG 12, 10 and 8 shall be the same as designated for Type RH conductors in this table.
**See Note 8a.

NOTES TO TABLES

4. Bare Conductors. Where bare conductors are used with insulated conductors, their allowable current-carrying capacity shall be limited to that permitted for the insulated conductors of the same size.

5. Type MI Cable. The temperature limitation on which the current carrying capacities of Type MI cable are based, is determined by the insulating materials used in the end seal. Termination fittings incorporating unimpregnated organic insulating materials are limited to 85° C. operation.

7. Use of Conductors With Higher Operating Temperatures. Where the room temperature is within 10 degrees C of the maximum allowable operating temperature of the insulation, it is desirable to use an insulation with a higher maximum allowable operating temperature; although insulation can be used in a room temperature approaching its maximum allowable operating temperature limit if the current is reduced in accordance with the Correction Factors for different room temperatures.

8. More Than Three Conductors in a Raceway. Tables 310-12 and 310-14 give the allowable current-carrying capacities for not more than three conductors in a raceway or cable. Where the number of conductors in a raceway or cable exceeds three, the allowable current-carrying capacity of each conductor shall be reduced as shown in the following Table:

Number of Conductors	Per Cent of Tabular Values
4 to 6	80
7 to 24	70
25 to 42	60
43 and above	50

Exception—When conductors of different systems, as provided in Section 300-3, are installed in a common raceway the derating factors shown above apply to the number of Power and Lighting (Articles 210, 220 and 230) conductors only.

8. (a) Where Type RH-RW rubber insulated wire is used in wet locations the allowable current carrying capacities shall be that of Column 2 in Tables 310-12 through 310-15. Where used in dry locations the allowable current carrying capacities shall be that of Column 3 in Tables 310-12 through 310-15.

9. Overcurrent Protection. Where the standard ratings and settings of overcurrent devices do not correspond with the ratings and settings allowed for conductors, the next higher standard rating and setting may be used.

10. Neutral Conductor. A neutral conductor which carries only the unbalanced current from other conductors, as in the case of normally balanced circuits of three or more conductors, shall not be counted in determining current-carrying capacities as provided for in Paragraph 8 of these notes.

In a 3-wire circuit consisting of two phase wires and the neutral of a 4-wire, 3-phase system, a common conductor carries approximately the same current as the other conductors and is not therefore considered as a neutral conductor.

11. Voltage Drop. The allowable current-carrying capacities in Tables 310-12 through 310-15 are based on temperature alone and do not take voltage drop into consideration.

12. Deterioration of Insulation. It should be noted that even the best grades of rubber insulation will deteriorate in time, so eventually will need to be replaced.

DC CIRCUIT CHARACTERISTICS

Ohm's Law:

$$E = IR \qquad I = \frac{E}{R} \qquad R = \frac{E}{I}$$

E = voltage impressed on circuit (volts)
I = current flowing in circuit (amperes)
R = circuit resistance (ohms)

In direct current circuits, electrical power is equal to the product of the voltage and current:

$$P = EI = I^2R = \frac{E^2}{R}$$

P = power (watts)
E = voltage (volts)
I = current (amperes)
R = resistance (ohms)

AC CIRCUIT CHARACTERISTICS

The instantaneous values of an alternating current or voltage vary from zero to a maximum value each half cycle. In the practical formulae which follow, the "effective value" of current and voltage is used, defined as follows:

Effective value = 0.707 × maximum instantaneous value

Impedance:

Impedance is the total opposition to the flow of alternating current. It is a function of resistance, capacitive reactance and inductive reactance. The following formulae relate these circuit properties:

$$X_L = 2\pi fL \qquad X_C = \frac{1}{2\pi fC} \qquad Z = \sqrt{R^2 + (X_L - X_C)^2}$$

X_L = inductive reactance (ohms)
X_C = capacitive reactance (ohms)
Z = impedance (ohms)
f = frequency (cyles per second)
C = capacitance (farads)
L = inductance (henrys)
R = resistance (ohms)
π = 3.14

Ohm's Law for AC Circuits:

$$E = I \times Z \qquad I = \frac{E}{Z} \qquad Z = \frac{E}{I}$$

POWER FACTOR

Power factor of a circuit or system is the ratio of actual power (watts) to apparent power (volt-amperes), and is equal to the cosine of the phase angle of the circuit:

$$PF = \frac{\text{actual power}}{\text{apparent power}} = \frac{\text{watts}}{\text{volts} \times \text{amperes}} = \frac{KW}{KVA} = \frac{R}{Z}$$

KW = kilowatts
KVA = kilovolt-amperes = volt-amperes × 1,000
PF = power factor (expressed as decimal)

SINGLE-PHASE CIRCUITS

$$KVA = \frac{EI}{1{,}000} = \frac{KW}{PF} \qquad KW = KVA \times PF$$

$$I = \frac{P}{E \times PF} \qquad E = \frac{P}{I \times PF} \qquad PF = \frac{P}{E \times I}$$

$P = E \times I \times PF$
P = power (watts)

THREE-PHASE CIRCUITS, BALANCED STAR OR WYE

$$I_N = 0 \qquad I = I_p \qquad E = \sqrt{3}\,E_p = 1.73\,E_p$$

$$E_p = \frac{E}{\sqrt{3}} = \frac{E}{1.73} = 0.577E$$

I_N = current in neutral (amperes)
I = line current per phase (amperes)
I_p = current in each phase winding (amperes)
E = voltage, phase to phase (volts)
E_p = voltage, phase to neutral (volts)

THREE-PHASE CIRCUITS, BALANCED DELTA

$$I = 1.732 \times I_p \qquad I_p = \frac{I}{\sqrt{3}} = 0.577 \times I$$

$E = E_p$

POWER: BALANCED 3-WIRE, 3-PHASE CIRCUIT, DELTA OR WYE

For unity power factor (PF = 1.0):

$P = 1.732 \times E \times I$

$$I = \frac{P}{\sqrt{3}\,E} = \frac{0.577P}{E} \qquad E = \frac{P}{\sqrt{3} \times I} = \frac{0.577P}{I}$$

P = total power (watts)

For any load:

$P = 1.732 \times E \times I \times PF \qquad VA = 1.732 \times E \times I$

$$E = \frac{P}{PF \times 1.73 \times I} = \frac{0.577 \times P}{PF \times I}$$

$$I = \frac{P}{PF \times 1.73 \times E} = \frac{0.577 \times P}{PF \times E}$$

$$PF = \frac{P}{1.73 \times I \times E} = \frac{0.577 \times P}{I \times E}$$

VA = apparent power (volt-amperes)
P = actual power (watts)
E = line voltage (volts) phase to phase
I = line current (amperes)

POWER LOSS: ANY AC OR DC CIRCUIT

$$P = I^2R \qquad I = \sqrt{\frac{P}{R}} \qquad R = \frac{P}{I^2}$$

P = power heat loss in circuit (watts)
I = effective current in conductor (amperes)
R = conductor resistance (ohms)

KILOWATTS TO HORSEPOWER

kw	hp	kw	hp	kw	hp
1	1.341	30	40.218	130	174.28
2	2.681	32	42.899	140	187.68
3	4.022	34	45.580	150	201.09
4	5.363	36	48.261	160	214.50
5	6.703	38	50.943	170	227.90
6	8.044	40	53.624	180	241.31
7	9.384	42	56.305	190	254.71
8	10.725	44	58.986	200	268.12
9	12.065	46	61.667	220	294.93
10	13.406	48	64.349	240	321.74
11	14.747	50	67.030	260	348.56
12	16.087	55	73.733	280	375.37
13	17.428	60	80.436	300	402.18
14	17.768	65	87.139	325	435.69
15	20.109	70	93.842	350	469.21
16	21.450	75	100.545	400	436.24
17	22.790	80	107.248	450	603.27
18	24.131	85	113.951	500	670.30
19	25.471	90	120.654	600	804.36
20	26.812	95	127.357	700	938.42
22	29.493	100	134.048	800	1072.48
24	32.174	110	147.47	900	1206.54
26	34.856	120	160.87	1000	1340.60
28	37.537				

HORSEPOWER TO KILOWATTS

hp	kw	hp	kw	hp	kw
1	.746	30	22.380	130	96.98
2	1.492	32	23.872	140	104.44
3	2.238	34	25.364	150	111.90
4	2.984	36	26.856	160	119.36
5	3.730	38	28.348	170	126.82
6	4.476	40	29.840	180	134.28
7	5.222	42	21.332	190	141.74
8	5.968	44	32.824	200	149.20
9	6.714	46	34.316	220	164.12
10	7.460	48	35.808	240	179.04
11	8.206	50	37.300	260	193.96
12	8.952	55	41.03	280	208.88
13	9.698	60	44.76	300	223.80
14	10.444	65	48.49	325	242.45
15	11.190	70	52.22	350	261.1
16	11.936	75	55.95	400	298.4
17	12.682	80	59.68	450	335.7
18	13.428	85	63.41	500	373.0
19	14.174	90	67.14	600	447.6
20	14.920	95	70.87	700	522.2
22	16.412	100	74.60	800	596.8
24	17.904	110	82.06	900	671.4
26	19.396	120	89.52	1000	746.0
28	20.888				

Note: Conversions not given may be obtained by adding appropriate given values.

DECIMAL EQUIVALENTS

Fraction	Decimal	Fraction	Decimal
1/64 =	0.015625	33/64 =	0.515625
1/32 =	0.031250	17/32 =	0.531250
3/64 =	0.046875	35/64 =	0.546875
1/16 =	0.062500	9/16 =	0.562500
5/64 =	0.078125	37/64 =	0.578125
3/32 =	0.093750	19/32 =	0.593750
7/64 =	0.109375	39/64 =	0.609375
1/8 =	0.125000	5/8 =	0.625000
9/64 =	0.140625	41/64 =	0.640625
5/32 =	0.156250	21/32 =	0.656250
11/64 =	0.171875	43/64 =	0.671875
3/16 =	0.187500	11/16 =	0.687500
13/64 =	0.203125	45/64 =	0.703125
7/32 =	0.218750	23/32 =	0.718750
15/64 =	0.234375	47/64 =	0.734375
1/4 =	0.250000	3/4 =	0.750000
17/64 =	0.265625	49/64 =	0.765625
9/32 =	0.281250	25/32 =	0.781250
19/64 =	0.296875	51/64 =	0.796875
5/16 =	0.312500	13/16 =	0.812500
21/64 =	0.328125	53/64 =	0.828125
11/32 =	0.343750	27/32 =	0.843750
23/64 =	0.359375	55/64 =	0.859375
3/8 =	0.375000	7/8 =	0.875000
25/64 =	0.390625	57/64 =	0.890625
13/32 =	0.406250	29/32 =	0.906250
27/64 =	0.421875	59/64 =	0.921875
7/16 =	0.437500	15/16 =	0.937500
29/64 =	0.453125	61/64 =	0.953125
15/32 =	0.468750	31/32 =	0.968750
31/64 =	0.484375	63/64 =	0.984375
1/2 =	0.500000		

TEMPERATURE

Centigrade	Fahrenheit	Centigrade	Fahrenheit
– 18	– 0.4	52	125.6
– 16	3.2	54	129.2
– 14	6.8	56	132.8
– 12	10.4	58	136.4
– 10	14.0	60	140.0
– 8	17.6	62	143.6
– 6	21.2	64	147.2
– 4	24.8	66	150.8
– 2	28.4	68	154.4
*0	32.0	70	158.0
2	35.6	72	161.6
4	39.2	74	165.2
6	42.8	76	168.8
8	46.4	78	172.4
10	50.0	80	176.0
12	53.6	82	179.6
14	57.2	84	183.2
16	60.8	86	186.8
18	64.4	88	190.4
20	68.0	90	194.0
22	71.6	92	197.6
24	75.2	94	201.2
26	78.8	96	204.8
28	82.4	98	208.4
30	86.0	**100	212.0
32	89.6	102	215.6
34	93.2	104	219.2
36	96.8	106	222.8
38	100.4	108	226.4
40	104.0	110	230.0
42	107.6	112	233.6
44	111.2	114	237.2
46	114.8	116	240.8
48	118.4	118	244.4
50	122.0	120	248.0

*Freezing **Boiling

Conversion Method $F = \frac{9}{5}C + 32$ $C = \frac{5}{9}(F - 32)$

CONVERSION FACTORS (continued)

These units	multiplied by	equal
amperes per square cm.	6.452	amperes per sq. inch.
ampere-turns	1.257	gilberts.
ampere-turns per cm.	2.540	ampere-turns per inch.
British thermal units	778.3	foot pounds.
	3.931×10^{-4}	horse-power-hours.
	1055	joules.
	2.930×10^{-4}	kilowatt hours.
B.t.u. per min.	12.97	foot-pounds per sec.
	0.02357	horse-power.
	0.01758	kilowatts.
	17.58	watts.
B.t.u. per sq. ft. per min.	0.1221	watts per square inch.
centimeters	3.281×10^{-2}	feet.
	0.3937	inches.
	6.214×10^{-6}	miles.
	393.7	mils.
	1.094×10^{-2}	yards.
centimeter-dynes	7.376×10^{-8}	pound-feet.
centimeter-grams	7.233×10^{-5}	pound-feet.
centimeters per second	1.969	feet per minute.
	0.03281	feet per second.
	0.02237	miles per hour.
	3.728×10^{-4}	miles per minute.
cms. per sec. per sec.	0.03281	feet per sec. per sec.
circular mils	7.854×10^{-7}	square inches.
	0.7854	square mils.
cubic centimeters	3.531×10^{-5}	cubic feet.
	6.102×10^{-2}	cubic inches.
cubic feet	1728	cubic inches.
	0.03704	cubic yards.
	7.481	gallons.
	59.84	pints (liq.).
	29.92	quarts (liq.).
cubic feet per minute	0.1247	gallons per sec.
	62.4	pounds of water per min.
cubic inches	5.787×10^{-4}	cubic feet.
	2.143×10^{-5}	cubic yards.
	4.329×10^{-3}	gallons.
	1.061×10^{5}	mil-feet.
	0.03463	pints (liq.).
	0.01732	quarts (liq.).
cubic meters	35.31	cubic feet.
	61,023	cubic inches.
	1.308	cubic yards.
	264.2	gallons.
	2113	pints (liq.).
	1057	quarts (liq.).
cubic yards	27	cubic feet.
	202.0	gallons.
cubic yards per minute	0.45	cubic feet per second.
	3.367	gallons per second.
degrees (angle)	60	minutes.
	0.01745	radians.
	3600	seconds.
degrees per second	0.01745	radians per second.
	0.1667	revolutions per minute.
	0.002778	revolutions per second.
dynes	2.248×10^{-6}	pounds.
ergs	9.480×10^{-11}	British thermal units.
	1	dyne-centimeters.
	7.378×10^{-8}	foot-pounds.
	10^{-7}	joules.
ergs per second	5.688×10^{-9}	B.t. units per minute.
	4.427×10^{-6}	foot-pounds per minute.
	7.378×10^{-8}	foot-pounds per second.

These units	multiplied by	equal
ergs per second	1.341×10^{-10}	horse-power.
	10^{-10}	kilowatts.
feet of water	62.43	pounds per square foot.
	0.4335	pounds per square inch.
feet per minute	0.01667	feet per second.
	0.01136	miles per hour.
feet per second	0.5921	knots.
	0.6818	miles per hour.
	0.01136	miles per minute.
feet per second per second	0.6818	miles per hour per sec.
foot-pounds	1.285×10^{-3}	British thermal units.
	1.356×10^{7}	ergs.
	5.050×10^{-7}	horse-power-hours.
	1.356	joules.
	3.766×10^{-7}	kilowatt-hours.
foot-pounds per minute	1.285×10^{-3}	B.t. units per minute.
	0.01667	foot pounds per second.
	3.030×10^{-5}	horse-power.
	2.260×10^{-5}	kilowatts.
foot-pounds per second	7.709×10^{-2}	B.t. units per minute.
	1.818×10^{-3}	horse-power.
	1.356×10^{-3}	kilowatts.
gallons	0.1337	cubic feet.
	231	cubic inches.
gallons per minute	2.228×10^{-3}	cubic feet per second.
gausses	6.452	lines per square inch.
gilberts	0.7958	ampere-turns.
gilberts per centimeter	2.021	ampere-turns per inch.
grams	980.7	dynes.
	15.43	grains.
	0.03527	ounces.
	0.03215	ounces (troy).
	2.205×10^{-3}	pounds.
horse-power	42.40	B.t. units per min.
	33,000	foot-pounds per minute.
	550	foot-pounds per second.
	1.014	horse-power (metric).
	0.7457	kilowatts.
	745.7	watts.
horse-power (boiler)	33.520	B.t.u. per hour.
	9.804	kilowatts.
horse-power-hours	2544	British thermal units.
	1.98×10^{6}	foot-pounds.
	2.684×10^{6}	joules.
	0.7455	kilowatt-hours.
inches	8.333×10^{-2}	feet.
	1.578×10^{-5}	miles.
	10^{3}	mils.
	2.778×10^{-2}	yards.
inches of water	0.5781	ounces per square inch.
	5.204	pounds per square foot.
	0.03613	pounds per square inch.
joules (Int.)	9.480×10^{-4}	British thermal units.
	10^{7}	ergs.
	0.7378	foot-pounds.
	2.778×10^{-4}	watt-hours.
kilograms	980,665	dynes.
	2.205	pounds.
	1.102×10^{-3}	tons (short).
kilolines	10^{3}	maxwells.
kilowatts	56.88	B.t. units per min.
	4.427×10^{4}	foot-pounds per min.
	737.8	foot-pounds per sec.
	1.341	horse-power.
	10^{3}	watts.

CONVERSION FACTORS (continued)

These units	multiplied by	equal
kilowatt-hours	3413	British thermal units.
	2.656×10^{6}	foot-pounds.
	1.341	horse-power-hours.
	3.6×10^{6}	joules.
lines per square cm.	1	gausses.
lines per square inch	0.1550	gausses.
lumens per sq. ft.	1	foot-candles.
maxwells	10^{-3}	kilolines.
megalines	10^{6}	maxwells.
megohms	10^{6}	ohms.
meters	3.281	feet.
	39.37	inches.
	6.214×10^{-4}	miles.
meters per minute	3.281	feet per minute.
	0.05468	feet per second.
	0.03728	miles per hour.
meters per second	196.8	feet per minute.
	3.281	feet per second.
	2.237	miles per hour.
	0.03728	miles per minute.
microhms	10^{-12}	megohms.
	10^{-6}	ohms.
miles	5280	feet.
	6.336×10^{4}	inches.
miles per hour	88	feet per minute.
	1.467	feet per second.
miles per hr. per sec.	1.467	feet per sec. per sec.
miles per minute	88	feet per second.
	52.10	knots.
	60	miles per hour.
mil-feet	9.425×10^{-6}	cubic inches.
millihenries	10^{-3}	henries.
millimeters	3.281×10^{-3}	feet.
	0.03937	inches.
	6.214×10^{-7}	miles.
	39.37	mils.
mils	8.333×10^{-5}	feet.
	10^{-3}	inches.
minutes (angle)	2.909×10^{-4}	radians.
ohms	10^{-6}	megohms.
	10^{6}	microhms.
ounces	0.0625	pounds.
ounces (troy)	480	grains.
	0.08333	pounds (troy).
ounces per square inch	0.0625	pounds per square inch.
pounds	444,823	dynes.
	16	ounces.
pounds (troy)	0.8229	pounds (av.).
pounds-feet squared	144	pounds-inches squared.
pounds-inches squared	6.945×10^{-3}	pounds-feet squared.
pounds of water	0.01602	cubic feet.
	27.68	cubic inches.
	0.1198	gallons.
pounds of water per min.	2.669×10^{-4}	cubic feet per sec.
pounds per cubic foot	5.787×10^{-4}	pounds per cubic inch.
	5.456×10^{-9}	pounds per mil foot.
pounds per cubic inch	1728	pounds per cubic foot.
	9.425×10^{-6}	pounds per mil foot.
pounds per square foot	0.01602	feet of water.
	6.944×10^{-3}	pounds per square inch.
pounds per square inch	2.307	feet of water.
	144	pounds per square foot.
quadrants (angle)	90	degrees.
	5400	minutes.
	1.571	radians.

These units	multiplied by	equal
quarts (dry)	67.20	cubic inches.
quarts (liq.)	3.342×10^{-2}	cubic feet.
	57.75	cubic inches.
radians	57.30	degrees.
	3438	minutes.
	0.6366	quadrants.
radians per second	57.30	degrees per second.
	9.549	revolutions per minute.
	0.1592	revolutions per second.
revolutions	360	degrees.
	4	quadrants.
	6.283	radians.
revolutions per minute	6	degrees per second.
	0.1047	radians per second.
	0.01667	revolutions per second.
revolutions per second	360	degrees per second.
	6.283	radians per second.
	60	revs. per minute.
revs. per sec. per sec.	6.283	radians per sec. per sec.
	3600	revs. per min. per min.
	60	revs. per min. per sec.
seconds (angle)	4.848×10^{-6}	radians.
square centimeters	1.973×10^{5}	circular mils.
	1.076×10^{-3}	square feet.
	0.1550	square inches.
square feet	2.296×10^{-5}	acres.
	1.833×10^{8}	circular mils.
	144	square inches.
square inches	1.273×10^{6}	circular mils.
	6.944×10^{-3}	square feet.
	10^{6}	square mils.
square meters	2.471×10^{-4}	acres.
	10.76	square feet.
	1550	square inches.
	3.861×10^{-7}	square miles.
square miles	640	acres.
	27.88×10^{6}	square feet.
	3.098×10^{6}	square yards.
square millimeters	1.973×10^{3}	circular mils.
square mils	1.273	circular mils.
	10^{-6}	square inches.
square yards	9	square feet.
	3.228×10^{-7}	square miles.
temp. (degs. Cent.) + 273	1	abs. temp. (degs. Cent.).
temp. (degs. Cent.) + 17.8	1.8	temp. (degs. Fahr.).
temp. (degs. Fahr.) + 460	1	abs. temp. (degs. Fahr.).
temp. (degs. Fahr.) − 32	5/9	temp. (degs. Cent.).
tons (long)	2240	pounds.
tons (metric)	2205	pounds.
tons (short)	2000	pounds.
tons (short) per sq. ft.	13.89	pounds per square inch.
tons (short) per sq. in.	2000	pounds per square inch.
watts	0.05688	B.t. units per min.
	10^{7}	ergs per second.
	44.27	foot-pounds per min.
	0.7378	foot-pounds per second.
	1.341×10^{-3}	horse-power.
	10^{-3}	kilowatts.
watt-hours	3.413	British thermal units.
	2656	foot-pounds.
	1.341×10^{-3}	horse-power-hours.
	10^{-3}	kilowatt-hours.
webers	10^{8}	maxwells.
yards	3	feet.
	36	inches.
	5.682×10^{-4}	miles.

HOW TO DESIGN A MODERN LIGHTING SYSTEM

1. **Analyze the Lighting Problem**
   Determine: 1) physical size and shape of the area; 2) architectural design and structural details; 3) occupancy, or end use, of the area; and 4) type and degree of severity of the seeing tasks which will exist.

2. **Selected Needed Lighting Levels**
   Refer to chart "New Lighting Levels as Recommended by the Illuminating Engineering Society" or Fig. 9-53 in 3rd Edition of the IES Lighting Handbook.

3. **Determine Desired Lighting Quality**
   Consider purpose for which lighting is to be used, visual envionment which is desirable, methods of light control and distribution.

4. **Select Proper Light Sources**
   Consider: 1) Efficiency (l/w); 2) total light output per lamp; 3) color (spectral) quality; 4) average rated life; 5) lumen depreciation throughout life; 6) heat produced by lamp; 7) effect of ambient temperature on light output and life; 8) light distribution control; 9) stroboscopic effect.

5. **Select Appropriate Lighting System**
   Consider from standpoint of suitability for architectural design, general appearance, structural details, overall efficiency, ease of maintenance, method of mounting, light distribution.

6. **Make a Lighting Calculation**
   Use appropriate method – see "Lighting Calculation Methods". Correct practice is to use the lumen method for interior lighting. Use "coefficient of utilizations" supplied by manufacturers of equipment being considered, or see Section 9 of 3rd Edition, IES Lighting Handbook.

7. **Prepare a Lighting Layout**
   Fit the number of luminaires determined by Step 6 into the area involved in a logical and practical arrangement. (Steps 6 and 7 should be worked out simultaneously, on a "trial and error" basis.)

8. **Provide Flexible Control of System**
   Use multiple switch control to individual multi-lamp units and multi-lamp areas, or a dimmer system for all lighting circuits.

9. **Analyze Available Electrical Power**
   Select the most economical and appropiate electrical distribution system possible from the available electric power system.

10. **Check Proposed Lighting System for Practicality**
    Verify all dimensions, double-check all calculations. Determine "watts/sq ft", check with normal practice. Determine impact of lighting load on air conditioning, analyze heat dissipation, check for interference with structural details and other system equipments, estimate and analyze first cost and operating cost.

HOW TO SELECT LUMINAIRES

Type of Light Source

Consider lumens per watt, size of lamps, color quality of light produced by the lamps, lamp life and replacement cost.

Type of Light Distribution

The type of lighting system and equipment layout selected will control the type of light distribution required for the luminaires or reflector equipment.

Initial Lumens Required

Light loss factors, spacing of outlets, and the desired lighting intensity maintained in service will establish light output in lumens required for each luminaire.

Overall Efficiency

Overall efficiency of luminaires varies from a high of approximately 90% downward. Consult manufacturers' light output and photometric data for luminaires under consideration.

Quality of Materials

Reflectors should have permanent type reflecting surface. Diffusing media should be durable, highly translucent, and should present an evenly lighted appearance. Gauge of metals should be adequate for necessary rigidity. Proper ventilation is important.

Ease of Maintenance

Luminaires should be easy to clean and relamp, with easily removable louvers, panels, etc. Ballasts should be readily accessible.

Appearance

Luminaires should present a good appearance and harmonize with interior and architectural treatment where used. Plain, simple lines are usually preferred.

Cost

Equipment cost is only part of the cost of good lighting. High first cost of equipment in a well designed lighting system may readily provide low cost lighting. Consider operating amd maintenance costs; then select a low-cost "system".

LAYOUT REMINDERS

For the Lighting System Designer

- *A customer buys a lighting system to provide an adequate, comfortable and appropriate lighting result*--not because he wants luminaires, lamps, conduit and wiring.
- *Luminaires and lighting equipment selected should be appropriate for the structure and the seeing problems involved.* Appearance, functional design, direct and reflected glare, shadows, maintenance, and lighting efficiency are all factors to be considered.
- *The lighting layout should fit the structural details of the building.* If plans and drawings are not available, survey the interior and note location of columns, beams, obstructions and other architectural features.
- *Use conventional layouts with symmetrical spacing of units,* if possible, with luminaires parallel and perpendicular to walls. Special geometrical patterns may be suitable in some cases but should be avoided generally unless they serve a specific functional or design purpose.
- *Use continuous-row fluorescent luminaires in preference to individual units.* The completed installation will look better and usually results in economies in wiring and installation.
- *Recessed and built-in lighting equipment does not light the ceiling.* Check your layout and room surface reflectances to see that use of such equipment will not produce uncomfortably dark ceilings nor excessive brightness ratios in the normal field of view.
- *Efficiency of trans-lighted ceilings is dependent to a great extent on the reflectance of the plenum cavity.* Be sure lamps can be mounted sufficiently high above diffusers or louvers to provide uniform brightness and spaced properly to provide desired intensity. Paint entire cavity white with highest possible reflectance.
- *Suspended luminaires of the direct-indirect type often produce the best lighting result most economically.* Check the suspension length carefully and limit it to the dimension which gives reasonably uniform ceiling brightness.
- *Luminaire spacings should be used which produce uniform illumination* and prevent undesirable shadows.
- *Flexible lighting layouts which will permit more luminaires or lamps to be added later* should be planned. This will permit an increase in lighting intensity without spoiling the symmetry or architectural harmony of the initial installation.
- *Plan the maintenance program along with the lighting layout.* Be sure that all luminaires and lighting equipment are easily accessible and are designed to be cleaned easily and quickly.
- *Consider the finish and reflection factor of ceiling and side walls.* Recommend proper colors and finishes to provide surrounding brightness conditions which promote eye comfort and good seeing conditions.
- *Double check all calculations and details* to insure the proper number of units and the ultimate desired lighting result.

LIGHTING CALCULATIONS METHODS

Type Lighting	Method of Calculation
General	Lumen Method Interflectance Method Zonal Lumen Method Point-by-Point Method
Supplementary	Point-by-Point Method Lumens-per-Foot Method
Floodlighting	Beam Lumens Method Point-by-Point Method
Street	Isocandle Curves

LIGHTING SYSTEM VOLTAGES

60 Cycle		High Frequency
Incandescent Filament Lamps	Electric Discharge Lamps	Fluorescent Lamps
28–32 110–125 220–240	110–125 200–216 220–240 240–280 440–480*	400** 600**

*Mercury lamp transformers.

**Phase-to-phase voltage, with grounded neutral to provide less than 300 volts to ground (NEC).

FORMULAS FOR GENERAL LIGHTING DESIGN

Lumen Method of Calculation

Average lumens reaching work plane = total initial lamp lumens × CU × MF

$$\text{Average footcandles at work plane} = \frac{\text{total initial lamp lumens} \times CU \times MF}{\text{area of room in sq ft}}$$

= total watts per sq ft × overall lumens per watt × CU × MF

$$\text{Area per lamp (sq ft)} = \frac{\text{initial lumens per lamp} \times CU \times MF}{\text{average footcandle level desired}}$$

$$\text{Area per luminaire (sq ft)} = \frac{\text{initial lumens per lamp} \times \text{no. of lamps per luminaire} \times CU \times MF}{\text{average footcandle level desired}}$$

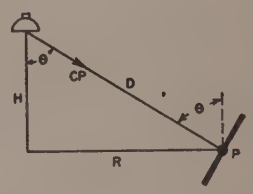
$$\text{Total watts per sq ft} = \frac{\text{average footcandle level desired}}{\text{overall lumens per watt} \times CU \times MF}$$

CU = Coefficient of Utilization
MF = Maintenance Factor

Point–by–Point Method of Calculation

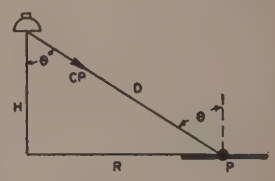
Illumination Normal to Light Ray:

$$E_n = \frac{CP}{D^2}$$



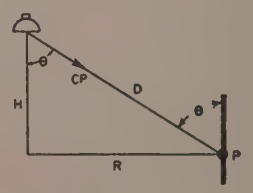
Horizontal Illumination:

$$E_h = \frac{CP}{D^2} \cos\theta = \frac{CP}{H^2} \cos^3\theta = \frac{CP \times H}{D^3}$$



Vertical Illumination:

$$E_v = \frac{CP}{D^2} \sin\theta = \frac{CP}{H^2} \cos^2\theta \sin\theta = \frac{CP \times R}{D^3}$$



E_n = Illumination on plane normal to light ray (footcandles)
E_h = Illumination on horizontal plane when light ray hits plane at angle θ (footcandles)
E_v = Illumination on vertical plane when light ray hits plane at angle θ (footcandles)
CP = Intensity of light source in direction of point P (candlepower)
D = Distance from light source to point P (feet)
H = Vertical mounting height of light source above plane of measurement (feet)
R = Horizontal distance from light source to point P (feet)
θ = Angle between light ray and a perpendicular line through light source (or a line perpendicular to horizontal plane through point P)

ROOM RATIO FORMULAS

Direct, Semi-Direct and General Diffuse Lighting:

$$\text{Room Ratio} = \frac{W \times L}{\text{Mounting height above work plane} \times (W+L)}$$

Semi-Indirect and Indirect Lighting:

$$\text{Room Ratio} = \frac{3 \times W \times L}{2 \times \text{ceiling height above work plane} \times (W+L)}$$

W = width of room

L = length of room

RELATION BETWEEN ROOM RATIO AND ROOM INDEX*

Average Room Ratio	Range of Room Ratios	Room Index
5.0	4.5 up	A
4.0	3.5 to 4.5	B
3.0	2.75 to 3.5	C
2.5	2.25 to 2.75	D
2.0	1.75 to 2.25	E
1.5	1.38 to 1.75	F
1.25	1.12 to 1.38	G
1.00	0.9 to 1.12	H
0.8	0.7 to 0.9	I
0.6	Less than 0.7	J

*Room ratios are preferred because of their greater accuracy. Use this table for conversion of Coefficient of Utilization data based on room indexes.

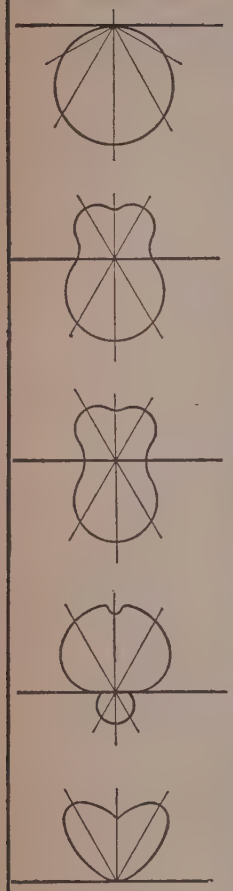
ROOM RATIOS

Room Width & Length (ft)		Direct, Semi-Direct and General Diffuse — Height of luminaire above floor (ft)						
		8	10	12	15	19	27	43
		Semi-Indirect and Indirect — Approx. ceiling height above floor (ft)						
W	L	10½	13½	16½	21	27	39	63
10	10	0.9	0.7	0.5				
	14	1.1	0.8	0.6	0.5			
	18	1.2	0.9	0.7	0.5			
	24	1.3	0.9	0.7	0.6			
	30	1.4	1.0	0.8	0.6			
14	14	1.3	0.9	0.7	0.6			
	20	1.5	1.1	0.9	0.7	0.5		
	30	1.7	1.3	1.0	0.8	0.6		
	40	1.9	1.4	1.1	0.8	0.6		
	60	2.1	1.5	1.2	0.9	0.7	0.5	
18	20	1.7	1.3	1.0	0.8	0.6		
	30	2.0	1.5	1.2	0.9	0.7		
	40	2.3	1.6	1.3	1.0	0.8	0.5	
	60	2.5	1.8	1.4	1.1	0.8	0.6	
	80	2.7	2.0	1.5	1.2	0.9	0.6	
25	30	2.5	1.8	1.4	1.1	0.8	0.6	
	40	2.8	2.1	1.6	1.2	0.9	0.6	
	60	3.2	2.4	1.9	1.4	1.1	0.7	
	80	3.5	2.5	2.0	1.5	1.2	0.8	0.5
40	40	3.6	2.7	2.1	1.6	1.2	0.8	0.5
	60	4.4	3.2	2.5	1.9	1.5	1.0	0.6
	80	4.9	3.6	2.8	2.1	1.6	1.1	0.7
	100	5.2	3.8	3.0	2.3	1.7	1.2	0.7
60	60	5.5	4.0	3.2	2.4	1.8	1.2	0.8
	100	6.8	5.0	3.9	3.0	2.3	1.5	0.9
	140	7.6	5.6	4.4	3.4	2.6	1.7	1.0
80	80	7.3	5.3	4.2	3.2	2.4	1.6	1.0
	140		6.8	5.4	4.1	3.1	2.1	1.3
	200		7.6	6.0	4.6	3.5	2.3	1.4
100	100		6.7	5.3	4.0	3.0	2.0	1.2
	150			6.3	4.8	3.6	2.5	1.5
	200			7.0	5.3	4.0	2.7	1.6
120	120			6.3	4.8	3.6	2.5	1.5
	160			7.2	5.5	4.2	2.8	1.7
	200				6.0	4.5	3.1	1.9

$$RR = \frac{W \times L}{H\,(W + L)}$$

For Type D, SD and GD, H = distance from luminaire to work plane 30 in. from floor.

For Type SI and I, H = distance from ceiling to work plane 30 in. from floor.



TYPES OF LIGHTING SYSTEMS

ICI* Light Distribution	Type of Luminaires	Type of Mounting	Lighting System Classification
Direct 90% to 100% Downward	Recessed	In Ceiling	Recessed (Inc. or F.I.)
	Individual Unit Continuous Row	On Ceiling	Surface Mounted Direct
	Individual Unit Continuous Row	On Ceiling	Suspended Direct
	Luminous Architectural Elements	On Ceiling, Side Walls, or Columns	Architectural
	Decorative Ornamental	On Ceilings or Walls	Ornamental
	Large-Area Low-Brightness	Recessed in Ceiling	Luminous Element
	Diffuser Ceilings Louver Ceilings	From Ceilings	Translighted Ceiling
Semi-Direct 60% to 90% Downward	Individual Unit Continuous Row	On Ceiling	Surface Mounted Semi-Direct
	Individual Unit Continuous Row		Suspended Semi-Direct
	Luminous Cornice	On Wall near Ceiling	Architectural
General Diffuse 40% to 60% Downward	Individual Unit	On Ceiling	Suspended
	Continuous Row		Direct-Indirect
Semi-Indirect 60% to 90% Upward	Individual Unit Continuous Row	On Ceiling	Suspended Semi-Indirect
	Luminous Cove Wall Bracket With Downward Component	On Wall	Semi-Indirect
	Luminous Ornamental	On Ceiling	Suspended Semi-Indirect
Indirect 90% to 100% Upward	Individual Unit Continuous Row	On Ceiling	Suspended Indirect
	Wall Urns Cove Pedestal Ceiling Soffit**	On Wall On Wall or In Ceiling Floor or Counter Top In Ceiling	Indirect Cove Indirect Indirect**

International Congress on Illumination approved classification of lighting systems according to a range of distribution of total light output upward or downward, in percentages as shown. A more detailed classification, as given here, has been found through practice to be more practical.
**According to ICI practice, soffit lighting might be classified as "direct". In actual practice, it is normally referred to as "indirect," since it is actually a form of cove lighting.

LUMINAIRE MOUNTING AND SPACING

Mounting Height of Luminaire	COMMERCIAL						INDUSTRIAL		
	Direct	Semi-Direct		Semi-Indirect		Indirect	Spread	Concentrating	
Ceiling Height for Indirect and Semi-Indirect Luminaires (feet)	Usual Spacing Between Units	Max. Spacing Between Units	Spacing* from Walls	Spacing Between Units	Spacing* from Walls	Length of Suspension	Maximum Spacing[1] (ft.)		
							Mounting Heights Above Floor	Spacing Between Units[2] Spread	Concen't.
8	7	7½	3	9	3	1-1½			
9	8	8	3	9½	3	1-1½			
10	9	9	3½	10½	3½	1½-2½	15	12	–
11	10	10½	3½	12	3½		16	12	–
12	10-12	12	4	14	4	2-3	18	18	–
13	10-12	13	4	15	4		20	20	–
14	10-13	15	5	17	5	3-4	22	20	–
15	10-13	17	5	19	5		24	23	16
16	10-13	19	6	21	6	4-5	26	25	17
18	10-20	21	6	23	6		28	30	18
20 or more	18-24	24	7	26	7	4-6	30 or more	30	20

*Spacings apply where desks or benches are next to wall, otherwise one-half the spacing between units is satisfactory.
[1]Units may have to be spaced closer to obtain desired illumination values.
[2]Where benches or machines are next to wall, spacing from wall should not exceed 1/3 spacing between units. Otherwise 1/2 unit spacing is suitable.

NEW LEVELS OF ILLUMINATION

Presented here is a condensed compilation of the new (1958) footcandle values recommended for specific visual tasks by the Illuminating Engineering Society and classified according to severity of the visual task. Note that these values apply to seeing tasks, and are not "average" values for general illumination on the horizontal plane. Higher initial levels should be provided as required by maintenance conditions, and special luminaire arrangements should be used for visual tasks in a plane other than horizontal. For more detailed information, see Fig. 9-53 in the IES Lighting Handbook -- 3rd Edition.

Severity of Visual Task

SPECIAL APPLICATIONS – 1000 footcandles and above. (1000 fc) – Extra fine bench work, grinding; precision manual arc welding; dental chair; feature displays – show windows; self-service stores; highly critical inspection. (2000 fc) – cloth inspection, emergency room, local. (2500 fc) – autopsy table; cystoscopic table; surgery operating table.

MOST DIFFICULT – 500 to 1000 footcandles. Fine bench and machine work, fine automatic machines, medium grinding, fine buffing and polishing; fine assembly; fine inspection; spotting; sewing; feature displays – show windows, service store interiors.

VERY DIFFICULT – 200 to 500 footcandles. (200 fc) – Auto final assembly, finishing, inspection line; color grading, inspection, examination in canning; repair and alteration in cleaning plant; tobacco grading and sorting; hospital fracture table; detailed drafting; designing, cartography in offices. (300 fc) – clay products color and glazing; cloth cutting; pressing; leather working – grading, matching, cutting, sewing; paint shops – extra fine hand painting and finishing.

DIFFICULT – 100 to 200 footcandles. (100 fc) – Regular office work, reading good reproductions, reading or transcribing shorthand, active filing, index reference, mail sorting; ticket counters; spray booths; general assembly line work; medium assembly; difficult inspection; medium bench and machine work, rough grinding, medium buffing and polishing; art gallery displays and on statuary; laboratory close work; etc. (150 fc) – accounting, auditing, tabulating, bookkeeping, business machine operation, rough layout drafting; bank teller's station; proof reading, imposing stones; hand and machine pressing.

ORDINARY – 30 to 100 footcandles. (50 fc) – a minimum for any visual task requiring more than casual use of the eyes; general lighting level for most industrial interiors; ordinary inspection; rough bench and machine work. (70 fc) – reading or transcribing handwriting in ink or medium pencil on good quality paper; school classrooms; work shop, bench work; study desks; drilling, riveting, screw fastening.

EASY – 30 footcandles and below. Less than 30 footcandles do not appear desirable in locations which involve visual tasks. Use in areas not involving critical or prolonged seeing, such as conference rooms, inactive files, washrooms, corridors, elevators, stairways, rough assembly, wrapping rooms, exterior areas generally, storage, auditoriums, lobbies, rough benchwork, wood sawing, parking lots, waiting rooms, rest room, smoking room, etc.

Illumination in Footcandles

2500
2000
1500
1000
700
500
300
200
150
100
70
50
30
20
15
10

NOTE: A) Illumination values for service areas should be not less than one-fifth that in adjacent areas, and in no case should they be less than 10 footcandles.
B) In general, intensities of 200 footcandles and above should be obtained with a combination of general lighting plus specialized supplementary lighting, taking special care to keep within recommended brightness ratios (see table).

RECOMMENDED ILLUMINATION FOR RESIDENCES (Footcandles)*

General Lighting	
Entrances, hallways, stairways, stair landings	10**
Living room, dining room, bedroom, family room, sun room, library, game or recreation room	10**
Kitchen, laundry, bathroom	30
Specific Visual Tasks	
Table games	30
Kitchen sink	70
Kitchen range and work surfaces	50
Laundry, trays, ironing board, ironer	50
Reading and writing, including studying	
Books, magazines, newspapers	30
Handwriting, reproduction and poor copies	70
Desks, study	70
Reading music scores	
Simple scores	30.
Advanced scores	70
Sewing	
Dark fabrics (fine detail, low contrast)	200
Prolonged periods (light to medium fabrics)	100
Occasional periods (coarse thread, large stitches, high contrast thread to fabric)	30
Shaving, makeup, grooming; on the face at mirror locations	50

*Minimum on the visual task.
**General lighting for these areas need not be uniform.

RECOMMENDED REFLECTANCE VALUES FOR INDUSTRIAL AREAS

Surface	Reflectance (%)
Ceiling	80
Wall	60
Desk and bench tops	35
Machines and equipment	25 to 30
Floors	not less than 15

Source: IES Lighting Handbook – 3rd Edition

RECOMMENDED SURFACE REFLECTANCES FOR OFFICES

Surface	Reflectance Range (%)
Ceiling finishes	80 – 92
Walls	40 – 60
Furniture	26 – 44
Office machines and equipment	26 – 44
Floors	21 – 39

Source: IES Lighting Handbook – 3rd Edition

RECOMMENDED BRIGHTNESS RATIOS FOR INTERIOR LIGHTING

Condition	Ratio
Between visual tasks and adjacent surroundings Example: White paper and desk top	1 to 1/3
Between visual tasks and more remote darker surfaces Example: White paper on desk & floor	1 to 1/10
Between visual tasks and more remote brighter surfaces Example: White paper on desk and luminaires	1 to 10
Between luminaires and adjacent surfaces in normal field of view	20 to 1
Anywhere within normal field of view Example: Luminaires and floor	40 to 1

These ratios are recommended as maximums: reductions are generally beneficial. See also Fig. 11-8 and Fig. 14-2 in IES Lighting Handbook – 3rd Edition

RATED AVERAGE LIFE, FLUORESCENT LAMPS

Type of Lamps	Burning Hours Per Start: 3	6	12	Continuous*
T-8 and T-12 preheat, rapid start, high output; T-6, T-8 and T-12 slimline; T-12 instant start; T-17 preheat; All circlines	7500	Plus 25%	Plus 60%	Plus 150%
T-17 instant start; 6-, 8-, 13-watt T-5 preheat 14-watt T-12 preheat	6000			
Power Groove lamps	5000			
4-watt T-5	4000			
Cold cathode LP	15000	Life not affected by number of starts		
Cold cathode HP	25000			

*Light output depreciates steadily as lamps are burned. Where infrequent starting, or continuous burning are involved, lamps should be replaced before they reach average life, for maximum lighting value.

Source: General Electric Co. Lamp Bulletin No. LS-101

RATED AVERAGE LIFE, MERCURY VAPOR LAMPS

Type Lamps	Rated Life (Hours)
PAR-38 bulb, 100-watt	2000 - 6000
PS-25 and BT-25 bulbs, 100-watt; PS-35 bulb, 125-watt; BT-28 bulb; 175-watt; BT-37 bulb, 430-watt; T-9½ bulb, 3,000-watt	6000
BT-28 bulb, 250-watt: T-16, BT-24, BT-37 R-52, R-57 bulbs, 400-watt; BT-56 bulb, 1000-watt	6000 - 7000
BT-37 bulb, 425-watt; BT-46 bulb, 700-watt	7000
R-57 bulb, 750-watt	8000
BT-56 bulb, 700-watt	9000

Burning hours shown are "economic life" under typical operating conditions. Actual burning hours may be up to 50% greater, depending on operating conditions.

Source: Based on data shown in Fig. 8-90, IES Lighting Handbook — 3rd Edition.

RATED AVERAGE LIFE, INCANDESCENT LAMPS

Type Lamps	Rated Life (Hours)
General Service Lamps; sizes 75, 100, 150, 200, 300 watts, A and PS bulbs	750
General Service Lamps; sizes 300, 500, 750, 1000, 1500 watts, PS bulbs, mogul base	1000
Lumiline Lamps, 30, 40, 60 watts	1500
Reflector and Projector Lamps	2000
Extended Life, Special Service Lamps 25 to 1500 watts	2500

Source: Lamp manufacturers' bulletins.

DATA ON TYPICAL FLUORESCENT BALLASTS
(Used for General Lighting)

Number and Type Lamp	Weight (lbs)	Line Current (amps)	Watts Consumed: By Ballast	Watts Consumed: Per Lamp*
For 60-cycle, 110-125 Volt Circuits				
2-20/T12	3 1/3	.42	9	24.5
2-30/T8	4	.70	17	38.5
2-40/T12	4	.85	18	49.0
2-40/T12/IS	9 1/3	.95	30	55.0
2-40/T12/RS	4	1.30	13	46.5
3-40/T12/RS	8	1.30	20	46.7
2-48T12	9 3/4	.95	30	53.0
2-72T12	2	1.40	29	69.5
2-96T12	13 3/4	1.60	34	91.0
2-48T12/HO	10	1.20	20	70.0
2-72T12/HO	12 1/2	1.70	30	100.0
2-96T12/HO	16	2.00	40	125.0
2-48PG17	15	2.60	41	128.5
2-72PG17	16	3.20	50	180.0
2-96PG17	16	4.00	55	227.5
For 60-cycle, 220-250 Volt Circuits				
2-40/T12	5 2/3	.43	20	50.0
2-90/T17	14 1/3	.93	31	105.5
2-40/T12/RS	4	.41	12	46.0
2-96T12	12	.80	29	88.5
2-96/T12/HO	13	1.10	54	132.0
For 60-cycle, 240-280 Volt Circuits				
2-40/T12	5 1/4	.37	18	49.0
2-90/T17	14 1/3	.83	31	105.5
2-48T12/HO	10	.56	30	55.0
2-48T12	5 3/4	.40	20	48.0
4-90/T17	16 1/2	1.65	36	99.0
For 60-cycle, 260-290 Volt Circuits				
2-40/T12	3 1/2	.19	10	45.0
2-40/T12/RS	4	.80	10	45.0
3-40/T12/RS	8	.55	20	46.7
2-96/T12/HO	15	.94	54	132.0
2-72T12	6	.62	25	67.5
2-96T12	6	.62	25	86.5
2-96PG17	12	1.85	75	237.5

*Lamp wattage plus proportional watts loss in ballast.
Based on manufacturers' bulletins.

LAMP SPECIFICATIONS

STANDARD FLUORESCENT LAMPS

Lamp Designation	Burnouts Per BLH*	Light Output** Initial Lumens	Light Output** Initial L/W*	Brightness (Foot-Lamberts)
Preheat Start Lamps (Starters Required)				
F202T12	134	1,030	51.5	1,600
F40CW**	48	2,800	70.0	2,100
F90T17	26	5,200	57.6	2,300
F40CW/3	43	3,100	77.5	2,350
Instant Start Lamps				
F40T12/IS	54	2,650	66.2	1,900
F40T17/IS	55	2,650	66.2	1,150
F48T12 Slimline	57	2,600	66.6	2,100
F72T12	37	4,100	73.2	2,100
F96T12 Slimline	26	5,600	75.6	2,100
Rapid-Start Lamps (No Starters Required)				
F40CW**	48	2,800	70.0	–
F40CW/3	43	3,100	77.5	–
F48T12/HO	40	3,500	58.4	2,800
F72T12/HO	25	5,550	65.2	2,800
F96T12/HO	18	7,600	72.5	2,800
F48T12/1500	21	6,200	56.8	5,300
F72T12/1500	14	9,300	59.2	5,100
F96T12/1500	10	13,250	65.0	5,050
F48PG17	22	6,900	62.7	...
F72PG17	14	10,900	68.2	...
F96PG17	9	15,000	70.0	...

* Based on 7,500 hours average rated life, and lumen output of cool white lamps.
** All lumen values for cool white lamps.
* Lumens per watt, lamp watts only
** New 40-watt T12 lamp, interchangeable between preheat circuits and rapid start circuits.
*** Brightness varies. See manufacturers' literature for details.
Source: General Electric Co., Lamp Dept., and IES Lighting Handbook – 3rd Edition

COLD CATHODE FLUORESCENT LAMPS

Lamp Designation	Lamp Current (ma)	Lamp Watts (HP)*	Light Output Initial Lumens	Light Output Initial L/W	Brightness (Foot-Lamberts)
2545 (T–8)	120	28	1000	35.8	1100
	150	33	1200	32.5	1280
	200	40	1500	37.5	1600
2569 (T8)	120	37	1600	43.3	1210
	150	43	1850	43.0	1440
	200	52	2200	42.4	1650
2593 (T8)	120	46	2200	47.8	1250
	150	54	2600	48.2	1480
	200	65	3200	49.4	1700
Hairpin 6–in. Dia.	120	46	2200	47.8	1250
	150	54	2600	48.2	1480
	200	65	3200	49.4	1700

*High Pressure

Source: Based on data in Fig. 8–101, IES Lighting Handbook – 3rd Edition

STANDARD INCANDESCENT LAMPS

Lamp Designation Watts	Lamp Designation Bulb	Rated Life (Hours)	Burnouts Per BLH**	Light Output Initial Lumens	Light Output Initial L/W
75	A-19	750	...	1,150	15.3
100	A-19*	750	...	1,700	17.0
150	A-23	750	...	2,700	18.0
200	PS-25	750	351	3,800	19.0
200	PS-30	750	360	3,720	18.6
300	PS-30	750	223	6,000	20.0
300	PS-35	1000	174	5,750	19.2
500	PS-40	1000	109	9,900	19.8
750	PS-52*	1000	60	16,700	22.3
1000	PS-52*	1000	44	23,000	23.0
1500	PS-52	1000	30	33,000	22.0
750	T-24	1000	70	14,200	19.0
1000	T-24	1000	50	20,000	20.0
500	R-52	2000	64	7,850	15.8
750	R-52	2000	39	12,700	17.0
1000	RB-52*	2000	28	18,000	18.0
550	R-57	2000	62	8,100	14.8
800	R-57	2000	37	13,500	16.9
1000	R-57	2000	31	16,300	16.3

* Coiled-coil filament axially mounted.

** Average lamp burnouts per billion lumen hours (calculated).

Source: General Electric Co., Lamp Department, and IES Lighting Handbook – 3rd Edition.

STANDARD MERCURY VAPOR LAMPS

Lamp Designation Watts	Lamp Designation Bulb	Lamp Designation ASA*	Rated Life (Hours)	Burnouts Per BLH**	Initial Lumens	Initial L/W***
100	PS-25	H4AC	6000	42	4,000	40.0
175	BT-28	H22KD	6000	23	7,200	41.1
250	BT-28	H5KF	6-7000	16-14	10,500	42.0
400	BT-24	H25DE	6-7000	11-9	15,500	38.7
400	BT-37	H1LB	6-7000	7-6	23,000	57.4
425	BT-37	H17LB	7000	7	20,000	47.5
430	BT-37	H24LB	6000	9	18,500	43.0
700	BT-46	H18NE	7000	3.6	40,000	57.2
700	BT-56	H15GW	9000	4.2	34,500	49.4
750	R-57	–	8000	5.5	22,500	30.0
1000	BT-56	H18GW	6-7000	3.2-2.8	51,800	51.8
1000	BT-56	H12GW	6-7000	2.9-2.5	58,000	58.0
3000	T-9½	H9FJ	6000	1.3	132.000	43.0

* New ASA designations have been adopted by all light source manufacturers.

** Average lamp burnouts per billion lumen hours (calculated), based on average rated life. Lamp life may be increased by as much as 50% under certain operating conditions.

*** Based on lamp watts only.

Source: Based on data given in Fig. 8-90, IES Lighting Handbook – 3rd Edition.

REFLECTOR AND PROJECTOR LAMPS

Bulb Types	Watts	Beam Spread (Degrees)*	Approx. Beam Lumens	Candle-power (10% Cone)**	Approx. Total Lumens
Reflector Spotlighting Lamps					
R-30	75	50	400	1,800	770
R-40	150	40	810	6,000	1,780
R-40	300	35	1,800	13,500	3,700
R-40	500	35	3,100	22,000	6,400
Reflector Floodlighting Lamps					
R-20	30	80	145	350	200
R-30	75	130	610	430	770
R-40	150	110	1,500	1,250	1,780
R-40	300	115	2,800	2,700	3,700
R-40	500	115	5,400	5,200	6,400
Projector Spotlighting Lamps					
PAR-38	75	30x30	480	4,000	750
PAR-38	150	30x30	1,100	10,500	1,730
PAR-46	200	17x23	1,200	32,000	2,350
PAR-56	300	15x20	1,800	70,000	3,650
PAR-64	500	13x20	3,000	110,000	6,000
Projector Floodlighting Lamps					
PAR-38	75	60x60	600	1,700	750
PAR-38	150	60x60	1,350	3,700	1,730
PAR-46	200	20x40	1,300	11,000	2,350
PAR-56	300	20x35	2,000	22,000	3,650
PAR-56	300	30x60	2,100	10,000	3,650
PAR-64	500	20x35	3,400	35,000	6,000
PAR-64	500	35x65	3,500	12,000	6,000

*Measured to 10% of maximum candlepower
**Average initial CP in 10° zone
Source: G.E. Co. Lamp Bulletin LS-152, Feb. 1959

COMPARATIVE STROBOSCOPIC EFFECT OF VARIOUS LIGHT SOURCES

Operated on 60-Cycle Supply

Lamp Type	Method of Operation	Relative Stroboscopic Effect
Incandescent		
200-watt		1
40-watt		7
Fluorescent		
Green	Single-lamp ballast	11
Blue	Single-Lamp ballast	49
White	Single-lamp ballast	19
White	2-lamp ballast	9
White	Single-lamp ballast on each phase of 3-phase circuit (3 lamps)	3
White	3 lamps: 1 on single-lamp ballast, 2 on 2-lamp ballast	14

Also see Figs 8-48 and 8-49 in IES Lighting Handbook 3rd Edition

Source: Westinghouse Lighting Handbook (1956)

COLOR TEMPERATURE OF VARIOUS LIGHT SOURCES

Light Source	Degrees K*
Natural Daylight	
Light from clear blue sky	12,000-27,000
Light from hazy or smoky sky	7,500-8,400
Light from totally overcast sky	6800
Sunlight, plus light from clear sky (noon)	6500
Direct sunlight (noon in midsummer)	5800
Light from heated sources**	
"Daylight" fluorescent lamps**	6500
Blue (daylight) photoflash lamps	6300
Cool white fluorescent lamps**	4500
Clear photoflash lamps	3800
White (standard) fluorescent lamps**	3500
Photoflood lamps	3400
500-watt projection lamp	3175
1000-watt standard incandescent lamp	3000
500-watt standard incandescent lamp	2950
60-watt standard incandescent lamp	2800

*Absolute temperature scale having its zero at −273°C (−459.4°F).
**By definition, color temperature applies only to light generated by heat (same color as a black body at that temperature), but fluorescent lamps have been arbitrarily color-designated in degrees Kelvin for purposes of simplicity.

FLUORESCENT LAMP LUMEN OUTPUT RATIOS

(Standard Cool White = 100)

Color of lamps	Multiplying Factor
Deluxe Cool White (CW/X)	0.71
Deluxe Warm White (WW/X)	0.71
Daylight (D)	0.93
Soft White (SW)	0.68
Green (G)	1.20
Gold (GO)	0.60
Blue or Pink (B or PK)	0.45
Red (R)	0.06

INTERCHANGEABILITY OF FLUORESCENT LAMPS

40-watt T-12 Bipin

Lamp Type	Ballast Type		
	Preheat	Instant Start	Rapid Start
Preheat	O.K.	Not Recommended	Will Not Start
Instant	Will Not Start	O.K.	Will Not Start
Rapid Start	O.K.	Not Recommended	O.K.

Source: IES Lighting Handbook — 3rd Edition.

LOAD AND OUTPUT OF TYPICAL FLUORESCENT LUMINAIRES

Fluorescent Lamps				1-Lamp Luminaire			2-Lamp Luminaire*		
Type Lamp	Length (ins)	Lamp Watts	Lamp Current (ma)	Lumens	Total Watts	L/W	Lumens	Total Watts	L/W
40T12	48	39.6	430	2,650	50.6	52.4	5300	97.2	54.5
40T12	48	–	–	2,800	–	–	5600		
40T12/1S	48	40.6	425	2,500	60.0	41.6	5000	100.0	50.0
40T12/RS	48	39.6	430	2,650	52.0	51.0	5300	92.0	57.6
40CW/3	48	–	–	3,100	–	–	6200		
48T12	48	38.5	428	2,360	–	–	4720	107.0	44.1
48T12	48	38.5	428	2,360	–	–	4720	● 97.0	48.6
48T12/RS	48	60.0	800	3,350	90.0	37.2	6700	140.0	47.9
48T12/RS	48	109.0	1500	6,200	–	–	12,400	250.0	49.6
48PG17	48	107.0	1500	6,000	–	–	12,000	255.0	47.1
40T17/1S	60	42.5	420	2,500	62.5	40.0	5000	105.0	47.6
90T17	60	90.0	1550	5,200	111.0	46.9	10,400	211.0	49.3
72T12	72	56.0	425	3,600	–	–	7,200	146.0	49.3
72T12	72	56.0	425	3,600	–	–	7,200	●137.0	52.5
72T12/RS	72	80.5	800	5,250	125.0	42.0	10,500	200.0	52.5
72T12/RS	72	157.0	1500	9,300	–	–	18,600	390.0	47.7
72PG17	72	155.0	1500	9,300	–	–	18,600	360.0	51.6
96T12	96	73.5	425	5,100	–	–	10,200	181.0	56.4
96T12	96	73.5	425	5,100	–	–	10,200	●175.0	58.2
96T12/RS	96	105.0	800	7,300	135.0	54.1	14,600	254.0	57.5
96T12/RS	96	204.0	1500	13,250	–	–	26,500	480.0	55.2
96PG17	96	215.0	1500	15,000	–	–	30,000	485.0	61.9

*Using HPF lead-lag ballasts and standard cool white lamps. For lumen output using other color lamps, use the multiplying factors given in table "Fluorescent Lamp Lumen Output Ratios"

● Based on use of 2-lamp series ballasts.

Source: Computed based on data in Figs. 8-98, 8-99, 8-100 and 8-103 of IES Lighting Handbook – 3rd Edition, and General Electric Co. Bulletin LS-101, July, 1958.

FLUORESCENT LAMP COLOR GUIDE

Application	Deluxe		Standard	
	Warm	Cool	Warm	Cool
Groceries	–	Good	–	Fair
Meat Markets	–	Good	–	Fair
Bakeries	Good	Fair	–	–
Confectionery	Good	Fair	–	–
Restaurants	Good	–	–	–
Tea Rooms	Good	–	–	–
Taverns	Good	–	Fair	–
Men's Wear	Fair	Good	–	Fair
Women's Wear	Good	–	Fair	–
Children's Wear	Good	–	Fair	–
Shoe Store	Good	–	Fair	–
Barber & Beauty*	Good*	Fair	–	–
Drug Stores	–	Good	–	Fair
Florist	Fair	Good	–	–
Jewelry	–	Good	–	Fair
Home Furnishings	Good	Fair	–	–
Variety	–	Good	–	Fair
Schools	–	–	–	Good
Offices	–	–	Good	Fair

*Except for tinting

Source: Lighting Products Inc.

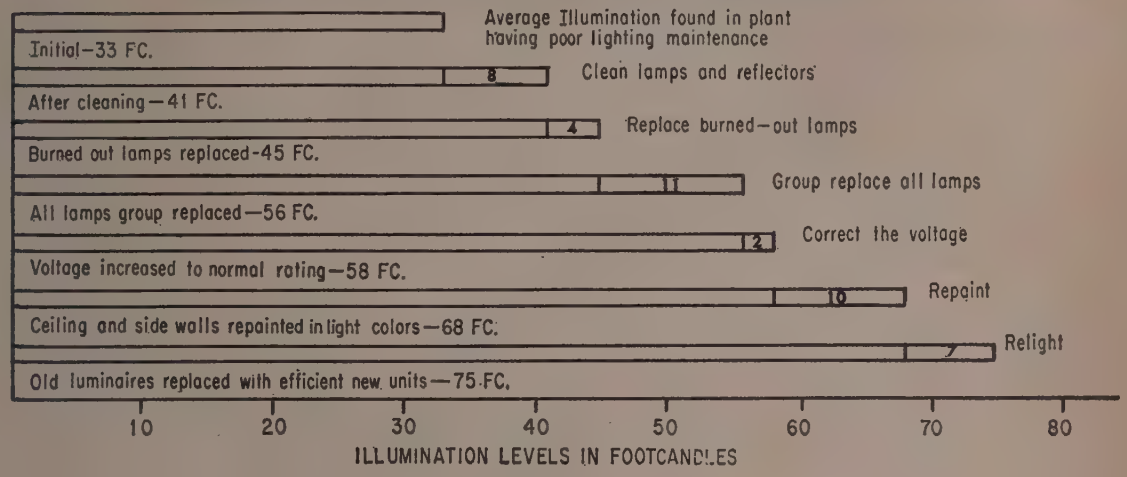
EFFICIENCY OF PRODUCTION OF COLORED LIGHT

Color	Approx. Lumens per Watt	
	Fluorescent	Filament*
Blue	20 to 26	0.5 to 1.5
Green	55 to 75	0.5 to 3
Yellow	22 to 31	5 to 10
Red	3 to 5	1 to 14

*Based on 100-watt lamp with typical color filters of various kinds; colored Bulbs, glass roundels and caps, gelatins, dyes and lacquers.

Source: Westinghouse Lighting Handbook - 1956.

MAINTENANCE STEPS FOR INCREASED LIGHTING LEVELS



Lighting maintenance is a highly important factor in lighting system design. The above chart illustrates its effectiveness on a typical lighting installation. Increased reflectances, improved brightness ratios, and higher lighting levels may be effected through simple maintenance procedures.

Select luminaires and lighting equipment which include easy maintenance features designed and built into the units by the lighting equipment manufacturers; and provide easy access to all luminaires and lighting equipment.

MAJOR CAUSES OF LIGHT LOSS
In Lighting Systems

Cause of Depreciation	Percent Loss
Lamp Depreciation (End of rated life)	
Incandescent	20
Fluorescent	30
Mercury Vapor	23
Circuit Voltage Depreciation	
With adequate wiring	Negligible
With poor wiring and overloading of circuits	5–20
Luminaire Light Absorption	18–35
Paint Depreciation	
Absorption of light by walls, ceilings, floors and other surfaces	5 (per year)
Dirt and Dust Depreciation	
1-month cleaning intervals	10
3-month cleaning intervals	15
6-month cleaning intervals	20
Cleaned when lamps burn out	30
Lamp Outage Depreciation	Up to 12

TYPES OF MAINTENANCE EQUIPMENT
Used for Lighting Servicing

Equipment	Mounting Height (Feet)			
	To 12	12–18	18–30	Over 30
Catwalk (Or Truss)			X	X
Crane (Where Available)			X	X
Crows-Nest Ladder			X	
Disconnecting Hanger		X	X	X
Portable Maintenance Platform		X	X	
Relamping Bridge			X	X
Step Ladder	X			
Straight Ladder		X		
Telescoping Platform Tower		X	X	

LIGHT SOURCE EFFICIENCIES

Source	Approx Lumens per Watt*
Candle (luminous efficiency equivalent)	0.1
Oil lamp (luminous efficient equivalent)	0.3
Original incandescent lamp (1879)	1.4
60-watt carbon filament lamp (1905)	4.0
60-watt coiled coil tungsten filament lamp (1954)	13.9
1000-watt general service lamp (1959)	23.0
No. 1 photoflood lamp (1959)	34.4
1000-watt Type H12KP (ASA) mercury vapor lamp (1958)	58.0
40-watt cool white fluorescent lamp, lamp only (1959)	77.5

*Initial value, lamp only

COEFFICIENTS OF UTILIZATION FOR TYPICAL LUMINAIRES						
Luminaire Type	Distribution and Maximum Spacing	Ceiling Walls Room Ratio	80%		50%	
			50%	30%	50%	10%
			Coefficients of Utilization			
Direct Lighting						
1-Lamp Aluminum Troffer Baffled	0% Up 60% Down 0.8 x MH	1.0	.43	.40	.42	.37
		1.5	.50	.47	.49	.44
		2.5	.55	.53	.54	.50
		4.0	.59	.57	.56	.54
3-Lamp 24" Troffer Diffusing Plastic	0% Up 60% Down 0.9 x MH	1.0	.37	.31	.35	.27
		1.5	.45	.40	.43	.35
		2.5	.52	.48	.49	.43
		4.0	.56	.54	.54	.50
Mercury Aluminum High Bay	0% Up 70% Down 0.9 x MH	1.0	.48	.45	.47	.42
		1.5	.57	.53	.55	.50
		2.5	.64	.61	.62	.58
		4.0	.68	.66	.66	.63
Mercury Porcelain High Bay Ventilated	0% Up 75% Down 1.0 x MH	1.0	.50	.46	.49	.42
		1.5	.59	.55	.58	.52
		2.5	.67	.64	.66	.61
		4.0	.74	.70	.71	.67
Mercury Prismatic High Bay	0% Up 70% Down 0.6 x MH	1.0	.67	.63	.64	.60
		1.5	.73	.70	.69	.65
		2.5	.78	.75	.74	.70
		4.0	.81	.79	.76	.74
Semi-Direct Lighting						
4-Lamp Enclosed Diffusing Plastic	10% Up 50% Down 1.0 x MH	1.0	.27	.23	.25	.19
		1.5	.34	.30	.30	.25
		2.5	.40	.37	.36	.32
		4.0	.45	.41	.40	.36
2-Lamp Porcelain Industrial Reflector	10% Up 70% Down 1.0 x MH	1.0	.47	.41	.45	.36
		1.5	.60	.54	.56	.48
		2.5	.71	.65	.66	.59
		4.0	.78	.74	.73	.67
2-Lamp Bare Lamp Channel	10% Up 80% Down 1.0 x MH	1.0	.46	.38	.42	.33
		1.5	.58	.51	.53	.44
		2.5	.69	.63	.64	.55
		4.0	.77	.72	.71	.64
Direct – Indirect Lighting						
Multilamp Metal Panels and Louvers	30% Up 35% Down 1.1 x MH	1.0	.31	.27	.28	.22
		1.5	.37	.33	.32	.27
		2.5	.44	.41	.39	.34
		4.0	.50	.47	.42	.39
2-Lamp Metal Sides Louver Shielding	45% Up 35% Down 1.2 x MH	1.0	.37	.30	.32	.24
		1.5	.46	.40	.38	.31
		2.5	.57	.51	.47	.40
		4.0	.63	.59	.51	.45

COEFFICIENTS OF UTILIZATION FOR TYPICAL LUMINAIRES

Luminaire Type	Distribution and Maximum Spacing	Ceiling Walls Room Ratio	80%		50%	
			50%	30%	50%	10%
			Coefficients of Utilization			
Semi-Indirect Lighting						
4-Lamp Translucent Sides and Bottom	60% Up 15% Down 1.2 x MH	1.0	.26	.20	.19	.12
		1.5	.36	.30	.25	.18
		2.5	.46	.40	.32	.25
		4.0	.54	.50	.37	.32
Fluorescent Grid Luminous Indirect	65% Up 10% Down 1.2 x MH	1.0	.27	.21	.20	.13
		1.5	.37	.30	.26	.19
		2.5	.48	.42	.33	.26
		4.0	.56	.51	.38	.33
Indirect Lighting						
Luminous Indirect Fluorescent	65% Up 5% Down 1.2 x MH	1.0	.19	.14	.13	.07
		1.5	.26	.20	.18	.12
		2.5	.35	.30	.24	.18
		4.0	.39	.37	.27	.23
Silvered Bowl Indirect	85% Up 0% Down 1.2 x MH	1.0	.24	.16	.17	.08
		1.5	.35	.26	.23	.13
		2.5	.48	.40	.29	.21
		4.0	.57	.52	.36	.29
Fluorescent Cove Without Reflector	Cove 12" to 18" Below Ceiling	1.0	.18	.15	.10	.07
		1.5	.25	.21	.15	.11
		2.5	.33	.30	.20	.17
		4.0	.36	.34	.22	.20
Luminous Ceiling Lighting						
Extended area system using diffusing glass or plastic. Ceiling cavity reflectance 75%		1.0	.31	.26	–	–
		1.5	.40	.35	–	–
		2.5	.49	.46	–	–
		4.0	.56	.54	–	–
Extended area system using opaque white louvers. Ceiling cavity reflectance 75%		1.0	.25	.22	–	–
		1.5	.30	.26	–	–
		2.5	.33	.31	–	–
		4.0	.35	.34	–	–

* Above CU values are based on floor of 10% reflectance.
Increase all CU values by percentages shown below for floors having 30% reflectance.

Percentage increase for floors having 30% reflectance as compared with 10% reflectance	1.0	5%	3%	4%	1%
	1.5	7%	6%	5%	2%
	2.5	10%	8%	7%	4%
	4.0	14%	12%	8%	6%

NOTE: Coefficients of Utilization shown above here were condensed from Fig. 9–3, IES Lighting Handbook – 3rd Edition, covering popular types of luminaires only. CU values are shown for four roomratios only (1.0, 1.5, 2.5 and 4.0). Interpolate for other room ratios, or refer to manufacturers' complete CU data for specific luminaires when greater accuracy is required.

HEAT LOSS FACTORS

To adjust these factors for insulation, see Figs. 16—20.

FIG. 1. FRAME FLOORS (Heat flow down)

TRANSMISSION HEAT LOSS (Watts per sq ft per deg F temp diff)

Type of ceiling below joists*	Type of floor above joists: Wood subfloor (25/32 in.) and felt plus			
	Cement (1½ in.) and ceramic tile (½ in.)	Hard-wood floor (¾ in.)	Plywood (⅝ in.) and floor tile or linoleum (⅜ in.)	Insulating board (⅜ in.) and hardboard (¼ in.) and floor tile or linoleum (⅜ in.)
No ceiling below; bottom of joists exposed to basement or crawl space	.091	.082	.079	.072
Metal lath and plaster (¾ in.)	.064	.060	.058	.054
Gypsum board (⅜ in.)	.061	.057	.056	.052
Wood lath and plaster	.060	.056	.055	.051
Gypsum lath (⅜ in.) and plaster	.060	.056	.055	.051
Insulating board (½ in.)	.050	.047	.046	.043
Insulating board lath (½ in.) and plaster	.049	.046	.045	.043
Acoustical tile (¾ in.) on wood furring	.047	.045	.044	.041
Acoustical tile (¾ in.) on gypsum board (⅜ in.)	.045	.042	.041	.039

* Plaster assumed of sand-aggregate, ½-in. thick, unless otherwise specified.

FIG. 2. CONCRETE FLOORS (Heat flow down)

TRANSMISSION HEAT LOSS (Watts per sq ft per deg F temp diff)

Concrete deck (inches)	Type of finish floor above slab	No finish ceiling; bare concrete slab	Ceiling applied directly to concrete slab			Ceiling suspended below slab						
						Gypsum board (⅜ in.)		Metal lath and plaster (¾ in.)	Acoustical tile			
			Plaster (⅛ in.)	Acoustical tile					On furring or channels		On gypsum board (⅜ in.)	
				½ in.	¾ in.	Without plaster	With plaster (¾ in.)		½ in.	¾ in.	½ in.	¾ in.
4 to 6	Bare slab; no finish floor above	.131	.130	.086	.073	.077	.075	.081	.064	.056	.059	.053
	Floor tile or linoleum (⅛ in.) or ceramic tile on terrazzo (1 in.)	.128	.127	.085	.072	.076	.075	.080	.062	.054	.058	.052
	Wood block (13/16 in.)	.098	.098	.071	.062	.065	.064	.068	.054	.049	.051	.047
	Wood subfloor (25/32 in.), felt and hardwood (¾ in.) on sleepers	.061	.061	.049	.045	.046	.045	.048	.041	.038	.039	.036
8 to 10	Bare slab; no finish floor above	.115	.114	.079	.068	.071	.070	.075	.058	.053	.056	.050
	Floor tile or linoleum (⅛ in.) or ceramic tile on terrazzo (1 in.)	.113	.112	.078	.067	.071	.069	.074	.058	.052	.055	.050
	Wood block (13/16 in.)	.089	.089	.066	.058	.061	.059	.063	.051	.048	.049	.044
	Wood subfloor (25/32 in.), felt and hardwood (¾ in.) on sleepers	.057	.057	.047	.043	.044	.043	.045	.039	.036	.037	.035

FIG. 3. CONCRETE CEILINGS (Heat flow up)

TRANSMISSION HEAT LOSS (Watts per sq ft per deg F temp diff)

Concrete deck (inches)	Type of finish floor above slab	No finish ceiling; bare concrete slab	Ceiling applied directly to concrete slab			Ceiling suspended below slab						
						Gypsum board (⅜ in.)		Metal lath and plaster (¾ in.)	Acoustical tile			
			Plaster (⅛ in.)	Acoustical tile					On furring or channels		On gypsum board (⅜ in.)	
				½ in.	¾ in.	Without plaster	With plaster (¾ in.)		½ in.	¾ in.	½ in.	¾ in.
4 to 6	Bare slab; no finish floor above	.181	.179	.104	.086	.105	.102	.113	.082	.069	.074	.064
	Floor tile or linoleum (⅛ in.) or ceramic tile on terrazzo (1 in.)	.175	.173	.102	.085	.103	.100	.110	.079	.068	.073	.064
	Wood block (13/16 in.)	.124	.123	.083	.071	.083	.081	.088	.067	.059	.062	.055
	Wood subfloor (25/32 in.), felt and hardwood (¾ in.) on sleepers	.070	.070	.056	.049	.055	.053	.057	.047	.043	.045	.041
8 to 10	Bare slab; no finish floor above	.151	.149	.094	.079	.094	.092	.100	.074	.064	.068	.060
	Floor tile or linoleum (⅛ in.) or ceramic tile on terrazzo (1 in.)	.147	.146	.092	.078	.093	.090	.099	.073	.064	.067	.060
	Wood block (13/16 in.)	.109	.108	.076	.066	.076	.074	.080	.062	.057	.058	.052
	Wood subfloor (25/32 in.), felt and hardwood (¾ in.) on sleepers	.065	.065	.052	.047	.052	.051	.054	.045	.041	.043	.039

FIG. 4. MASONRY WALLS (Heat flow outward)

TRANSMISSION HEAT LOSS (Watts per sq ft per deg F temp diff)

Interior finish*	Exterior finish: Face brick (4 in.) or stone (4 in.) or precast concrete (4 to 6 in.) plus									Common brick (4 in.) or precast concrete (8 in.) plus								
	Concrete block backing			Hollow clay tile backing			Concrete backing			Concrete block backing			Hollow clay tile backing			Concrete backing		
	Thickness of backing (inches)									Thickness of back ng (inches)								
	4	8	12	4	8	12	4	8	12	4	8	12	4	8	12	4	8	12
Bare masonry wall; no interior finish	.143	.120	.112	.120	.092	.077	.177	.161	.148	.123	.106	.100	.106	.084	.071	.147	.137	.127
Plaster (⅝ in.) applied directly to masonry	.136	.115	.108	.115	.089	.075	.166	.152	.140	.117	.102	.096	.102	.081	.069	.140	.130	.121
Metal lath and plaster (¾ in.) on furring	.093	.083	.079	.083	.069	.060	.106	.100	.096	.084	.076	.073	.076	.064	.056	.095	091	.086
Gypsum lath (⅜ in.) on furring	.088	.079	.075	.079	.066	.058	.100	.095	.090	.080	.072	.070	.072	.061	.054	.090	.086	.082
Wood lath or gypsum lath (⅜ in.) and plaster on furring	.086	.077	.074	.077	.065	.057	.097	.092	.088	.078	.071	.068	.071	.060	.053	.087	.083	.080
Insulating board lath (½ in.) and plaster on furring	.065	.060	.058	.060	.052	.047	.071	.068	.066	.061	.056	.054	.056	.049	.044	.066	.064	.062

FIG. 5. FRAME CEILINGS (Heat flow up)

TRANSMISSION HEAT LOSS (Watts per sq ft per deg F temp diff)

Type of ceiling below joists*	No floor above. Top of joists exposed to ventilated attic space	Type of floor above joists: Wood subfloor only (25/32 in.)	Wood subfloor (25/32 in.) and felt plus: Cement (1½ in.) and ceramic tile (½ in.)	Hardwood floor (¾ in.)	Plywood (⅝ in.) and floor tile or linoleum (⅛ in.	Insulating board (⅜ in.) and hardboard (¼ in.) and floor tile or linoleum (⅛ in.)
Metal lath and plaster (¾ in.)	.217	.092	.082	.075	.072	.066
Gypsum board (⅜ in.)	.190	.087	.078	.071	.069	.063
Wood lath and plaster	.181	.085	.076	.070	.068	.062
Gypsum lath (⅜ in.) and plaster	.180	.085	.076	.070	.068	.062
Insulating board (½ in.)	.111	.065	.060	.056	.055	.051
Insulating board lath (½ in.) and plaster	.107	.064	.059	.055	.054	.050
Acoustical tile (¾ in.) on furring	.098	.061	.056	.053	.051	.048
Acoustical tile (¾ in.) on gypsum board (⅜ in.)	.088	.057	.053	.050	.049	.046

FIG. 6. FRAME WALLS (Heat flow outward)

TRANSMISSION HEAT LOSS (Watts per sq ft per deg F temp diff)

Interior finish*	Exterior finish**: Wood siding, wood shingles, or wood panels					Wood shingles with insulated backer board or asphalt insulating siding					Brick veneer or plywood (⅜ in.)				
	Sheathing					Sheathing					Sheathing				
	Plywood	Gypsum board	Wood	Insulating board ½ in.	Insulating board 1 in.	Plywood	Gypsum board	Wood	Insulating board ½ in.	Insulating board 1 in.	Plywood	Gypsum board	Wood	Insulating board ½ in.	Insulating board 1 in.
Metal lath and plaster (¾ in.)	.092	.091	.077	.072	.061	.081	.080	.069	.065	.056	.105	.103	.086	.079	.066
Gypsum board (⅜ in.) or plywood (¼ in.)	.087	.086	.073	.069	.059	.075	.074	.064	.061	.053	.099	.097	.081	.076	.064
Wood lath or gypsum lath (⅜ in.) and plaster	.085	.084	.072	.067	.058	.073	.072	.063	.059	.052	.096	.094	.079	.074	.062
Wood panels (¾ in.)	.074	.073	.063	.060	.052	.065	.064	.057	.054	.047	.082	.080	.069	.065	.056
Insulating board lath (½ in.) and plaster	.064	.064	.056	.054	.047	.057	.057	.051	.049	.043	.071	.070	.061	.058	.050

* Plaster assumed of sand-aggregate, ½-in. thick, unless otherwise specified.

** Sheathing details: Gypsum ½"; Plywood 5/16"; Wood 25/32" plus building paper; Insulating Board 25/32". Furring strips 1" thick are assumed between wood shingles and gypsum, plywood and insulating board.

HEAT LOSS FACTORS

FIG. 7. HEAT LOSS CONVERSION TABLE

Btu per hr	Watts	Btu per hr	Watts	Btu per hr	Watts	Btu per hr	Watts	Btu per hr	Watts
.01	.0029	.21	.062	.41	.120	.61	.179	.81	.237
.02	.0059	.22	.064	.42	.123	.62	.182	.82	.240
.03	.0088	.23	.067	.43	.126	.63	.185	.83	.243
.04	.0117	.24	.070	.44	.129	.64	.188	.84	.246
.05	.0146	.25	.073	.45	.132	.65	.190	.85	.249
.06	.0176	.26	.076	.46	.135	.66	.193	.86	.252
.07	.0205	.27	.079	.47	.138	.67	.196	.87	.255
.08	.0234	.28	.082	.48	.141	.68	.199	.88	.258
.09	.0264	.29	.085	.49	.144	.69	.202	.89	.261
.10	.029	.30	.088	.50	.146	.70	.205	.90	.264
.11	.032	.31	.091	.51	.149	.71	.208	.91	.267
.12	.035	.32	.094	.52	.152	.72	.211	.92	.270
.13	.038	.33	.097	.53	.155	.73	.214	.93	.272
.14	.041	.34	.100	.54	.158	.74	.217	.94	.275
.15	.044	.35	.103	.55	.161	.75	.220	.95	.278
.16	.047	.36	.105	.56	.164	.76	.223	.96	.281
.17	.050	.37	.108	.57	.167	.77	.226	.97	.284
.18	.053	.38	.111	.58	.170	.78	.229	.98	.287
.19	.056	.39	.114	.59	.173	.79	.231	.99	.290
.20	.059	.40	.117	.60	.176	.80	.234	1.00	.293

FIG. 8. INFILTRATION

(Watts per cu ft per deg F temp diff)

½ air change per hr	1 air change per hr	2 air changes per hr
.0027	.0053	.0106

FIG. 9. HOLLOW GLASS BLOCKS

(Heat flow horizontal)

TRANSMISSION HEAT LOSS (watts per sq ft per deg F temp diff)

Nominal size (inches)	Undivided cavity	With glass fiber dividing cavity
6 x 6 x 4 thick	.176	—
8 x 8 x 4 thick	.165	.141
12 x 12 x 4 thick	.153	.129

FIG. 10. CONCRETE FLOOR SLABS*

(Unheated)

TRANSMISSION HEAT LOSS (Watts per ft of exposed edge)

Outdoor design temperature (deg F)	Edge insulation thickness (inches)**	
	1	2
−20 to −30	16	14.5
−10 to −20	14.5	13
0 to −10	13.5	12

* At or near grade level

** Insulation should extend 24 in. horizontally under slab; or 24 in. down along the foundation wall below slab level.

FIG. 11. BASEMENT WALLS AND FLOORS

(Below grade)*

TRANSMISSION HEAT LOSS** (Watts per sq ft)

Ground water temperature (deg F)	Walls	Floors
40	1.76	0.88
50	1.17	0.59
60	0.59	0.29

* Representative concrete or concrete block construction

** Based on 70F indoor design temperature

FIG. 12.

BASEMENT WALLS

(Above grade)

TRANSMISSION HEAT LOSS (Watts per sq ft per deg F temp diff)

Wall thickness (in.)	Concrete (sand aggregate)	Concrete block (Three oval core)	
		Cinder aggregate	Sand and gravel aggregate
8	.197	.114	.150
10	.178	—	—
12	.162	.107	.138

FIG. 13.

SKYLIGHTS

(Heat flow up)

TRANSMISSION HEAT LOSS (Watts per sq ft per deg F temp diff)

Type of sash	Single glass	Two sheets of glass		
		¼-in. air space	½-in. air space	1-in. or more air space
Large sheets of glass; no sash	.410	.205	.194	.185
Wood*	.370	.185	.174	.100
Steel*	.410	.206	.194	.185
Aluminum*	.451	.226	.212	.203

* 80% glass, 20% sash

FIG. 14.

WINDOWS

(Heat flow horizontal)

TRANSMISSION HEAT LOSS (Watts per sq ft per deg F temp diff)

Type of sash	Single glass	Unit-type double glazing**		Single glass with storm sash	
		¼-in. air space	½-in. air space	½-in. air space	1-in. or more air space
Large sheets; no sash	.331	.179	.161	.161	.155
Wood*	.299	.161	.153	.147	.141
Steel*	.331	.179	.194	.161	.155
Aluminum*	.365	.197	.210	.179	.170

* Windows assumed 80% glass, 20% sash
** Sealed units; two panes in same opening

FIG. 15.

SOLID WOOD DOORS

(Heat flow outward)

TRANSMISSION HEAT LOSS (Watts per sq ft per deg F temp diff)

Door thickness (in.)		Exposed door	With glass storm door
Nominal	Actual		
Thin panel*	—	.249	.114
1	25/32	.188	.108
1 1/4	1 1/16	.161	.100
1 1/2	1 5/16	.144	.094
1 3/4	1 3/8	.141	.091
2	1 5/8	.126	.082
2 1/2	2 1/8	.105	.076
3	2 5/8	.091	.067

* Thin wood panel or single panes of glass

CORRECTION OF HEAT-LOSS FACTORS FOR FIBROUS INSULATION

How to Use Curves:

1. Locate "Heat-Loss Factor Without Insulation on left-hand scales.
2. Line up ruler with same factor on right-hand scales and mark appropriate curve where it is crossed by the ruler.
3. Place ruler vertically through mark and read "Heat-Loss Factor With Insulation" on bottom (or top) scales.

Two sets of curves are given: one for constructions where the insulation only partially fills the space between framing members, leaving a resultant air space at least ¾ in. wide, and the other for constructions where the insulation completely fills the space. The latter curves compensate for the loss of the air space. (For ceilings without a floor on the top side of the joists and for floors without a ceiling on the underside of the joists, Fig. 16 should be used.)

FIG. 16. CEILINGS, FLOORS AND WALLS

Insulation completely fills joist or stud space.

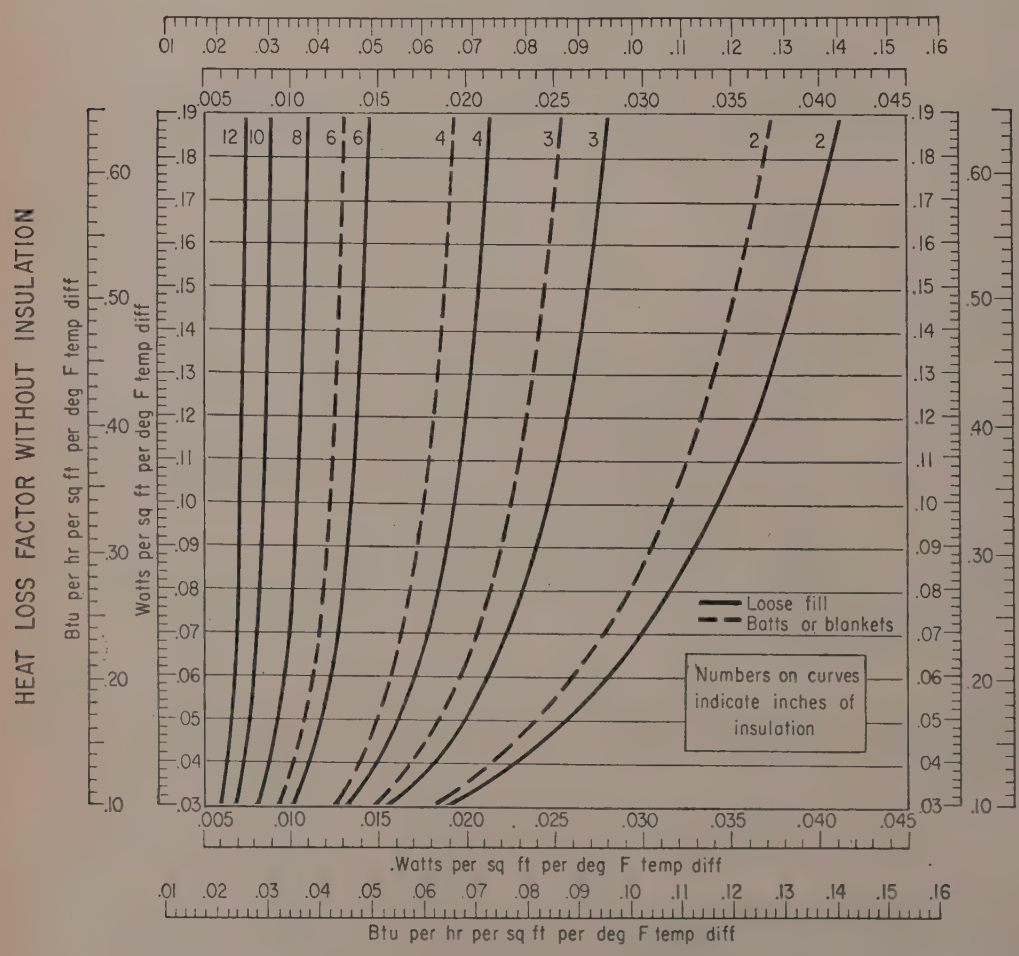
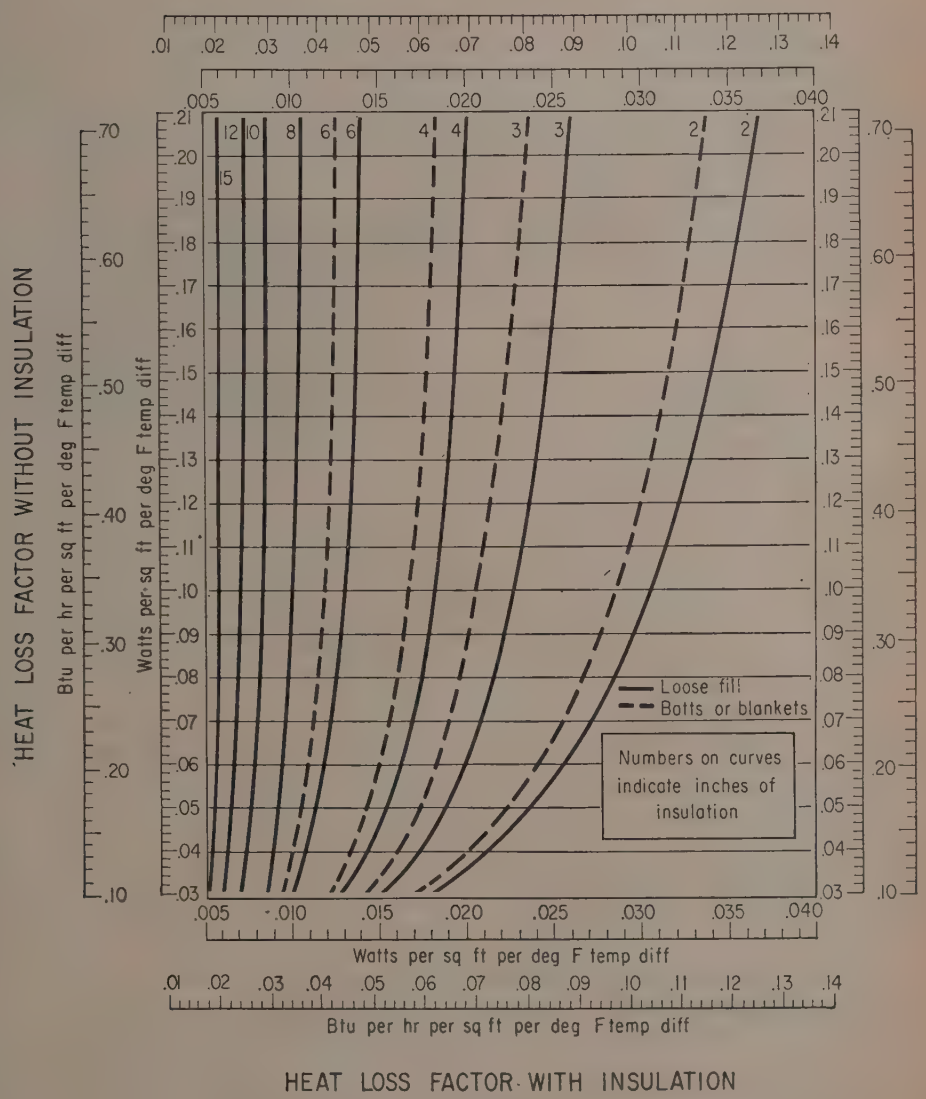


FIG. 17. CEILINGS, FLOORS AND WALLS

Insulation partially fills joist or stud space.



Curves are based on insulation conductivities of .27 and .30 Btu per hr per sq ft per deg TD for each inch of thickness for batts or blankets and loose fill, respectively. For thicknesses up to 6 in., curves are given for both batts or blankets (dashed curves) and loose fill (solid curves), since both types are available and in common use. Heat-loss scales are given both in terms of watts and Btu's to suit the familiarity of the user.

These curves may also be used for masonry walls faced with studs on the inside.

Where air spaces are involved, slight discrepancies may be introduced by applying the same curves to wall, floor and ceiling constructions due to the variation in insulating effect of the air spaces with direction of heat flow. However, such discrepancies will probably have less effect on the overall result than variations introduced during construction.

CORRECTION OF HEAT-LOSS FACTORS FOR REFLECTIVE INSULATION

How to Use Curves:

1. Locate "Heat-Loss Factor Without Insulation" on left-hand scales.
2. Line up ruler with same factor on right-hand scales and mark appropriate curve where it is crossed by the ruler.
3. Place ruler vertically through mark and read "Heat-Loss Factor With Insulation" on bottom (or top) scales.

It is assumed that the reflective material fastened to the tops of ceiling joists is exposed to an unheated attic space; that the material on the underside of the floor joists is exposed to an unheated basement or crawl space.

The effect of floor construction on the overall heat loss factor is slight; therefore only one factor is given for each air-space combination.

The curves of Fig. 18 were plotted from data given in Table 16A, Chapter 9, 1959 *Heating Ventilating Air Conditioning Guide*. They apply to frame walls or furred-out masonry walls, provided that each air space is at least ¾ in. wide.

The insulating effect of reflective air spaces varies with the direction of heat flow, the thickness of the spaces, the overall temperature difference, the emissivity of the reflecting material, and the relative conductance of the building materials bounding the air spaces; therefore no single set of correction factors can hope to account for all variables. However, reasonable variations from the conditions assumed in these charts will change the results probably no more than variations introduced during construction.

FIG. 18. FRAME CEILINGS

No Floor Above; Heat Flow Up

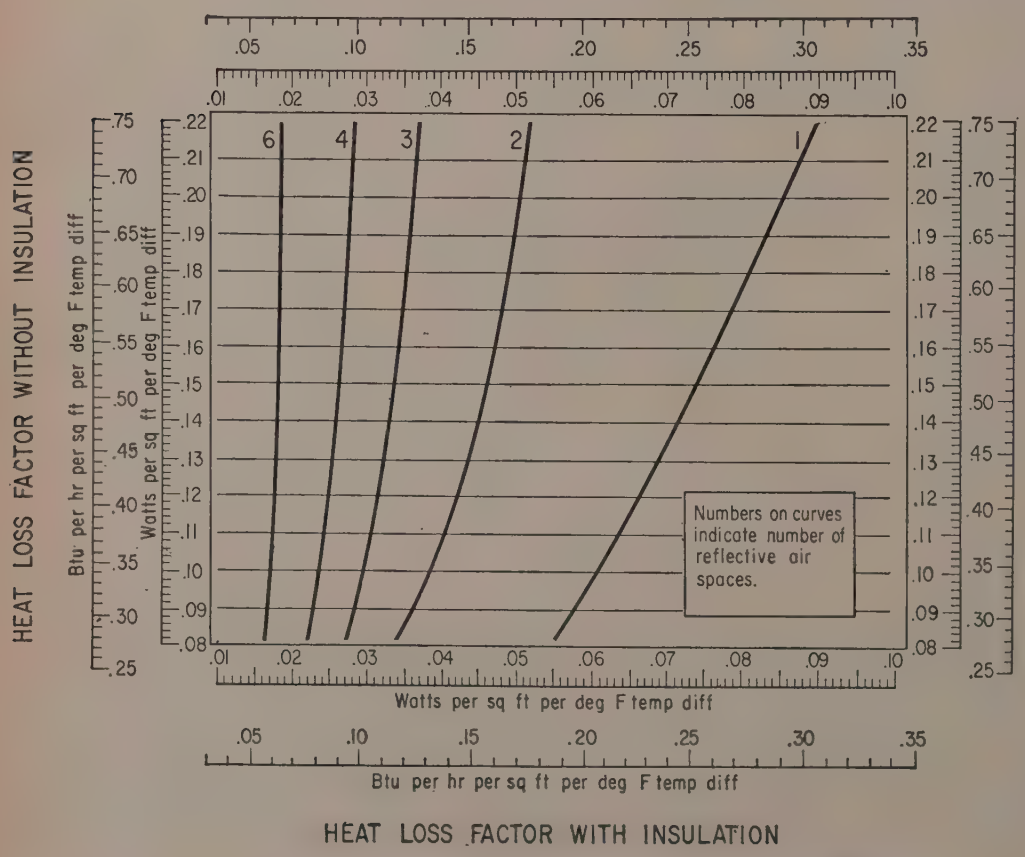
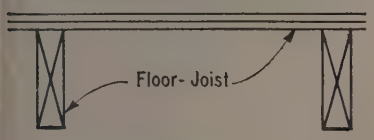


FIG. 19. FRAME FLOORS No Ceiling Below; Heat Flow Down

Reflective both sides — Effective emissivity = .05
Reflective one side only — Temperature difference = 70 F

UNINSULATED

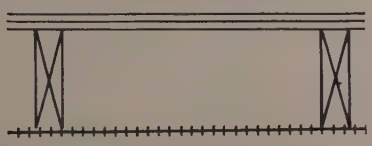
.072-.091 Watt (.24 - .31 Btu)



(A) Factors shown represent range for common constructions

1 SPACE

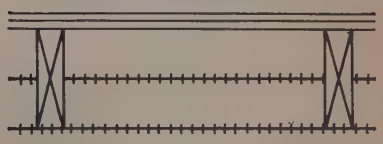
.024 Watt (.082 Btu)



(B) Sheet of aluminum fastened to underside of joists

2 SPACES

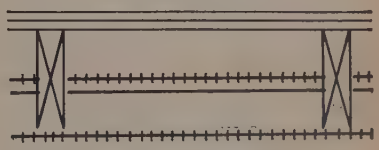
.012 Watt (.041 Btu)



(C) Same as "B", with additional sheet at midpoint of joists

3 SPACES

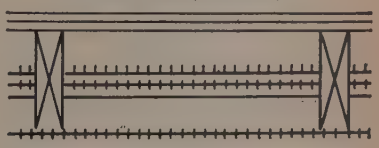
.011 Watt (.037 Btu)



(D) Same as "B", with 2-sheet aluminum-paper assembly centered on joists

4 SPACES

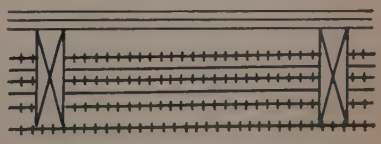
.0098 Watt (.034 Btu)



(E) Same as "D", but with 3-sheet assembly centered in space between joists

6 SPACES

.0078 Watt (.027 Btu)



(F) Same as "D", but with 5-sheet assembly centered in space between joists

FIG. 20. WALLS Heat Flow Horizontal

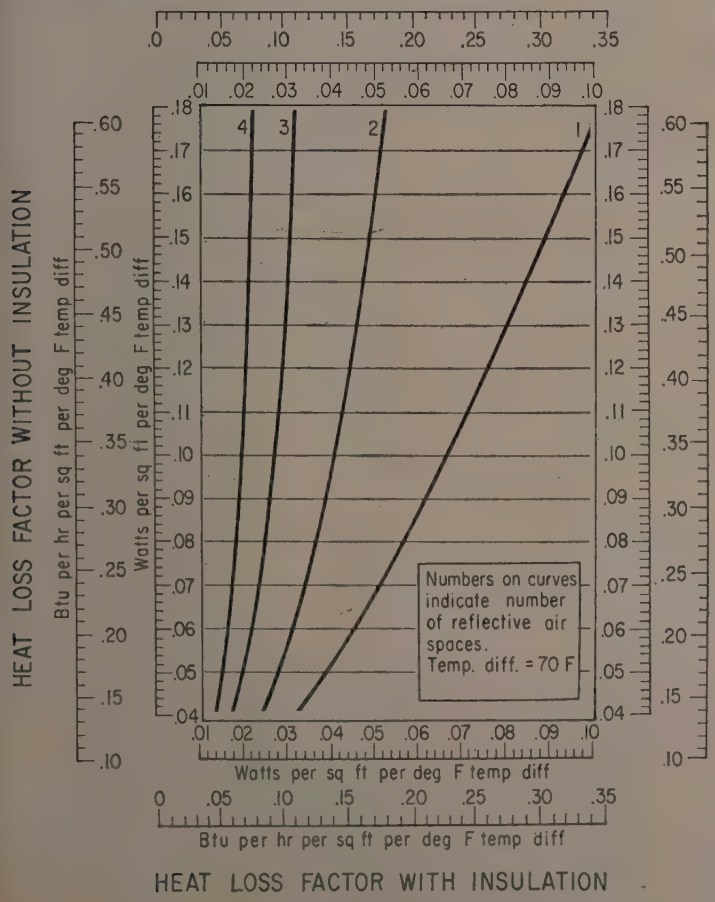


FIG. 21. CLIMATIC DATA—U.S. CITIES

Asterisks indicate airport stations; others are city office stations. Average temperature = 65—(degree-days/heating days).

Location	Heating Season	Heating Days	Ave. Mean Temp, F	Degree-Days	Outside Design Temp, F
ALABAMA					
Anniston*	Oct 15–Apr 24	192	50.3	2820	12
Birmingham*	Oct 15–Apr 25	193	50.6	2780	12
Mobile	Nov 2–Apr 1	151	54.9	1529	22
Montgomery	Oct 25–Apr 10	168	53.4	1954	18
ARIZONA					
Flagstaff*	Aug 12–Jul 5	328	42.1	7525	— 4
Phoenix	Nov 5—Apr 2	149	55.0	1492	36
Yuma	Nov 15–Mar 7	113	56.6	951	38
ARKANSAS					
Fort Smith*	Oct 16–Apr 20	187	48.0	3188	6
Little Rock*	Oct 17–Apr 21	187	49.1	2982	8
CALIFORNIA					
Eureka	.....	365	52.3	4632	32
Fresno*	Oct 16–Apr 25	192	51.8	2532	32
Independence	Sept 25–May 23	241	49.1	3832	12
Los Angeles	Nov 2–May 10	190	57.4	1451	41
Sacramento	Oct 16–May 14	211	52.7	2600	30
San Diego*	Oct 22–Jun 2	224	58.0	1574	43
San Francisco	.....	365	56.6	3069	37
San Jose	Oct 7–Jun 7	244	55.1	2410	38
COLORADO					
Denver	Sept 15–Jun 7	266	43.7	5673	—12
Grand Junction*	Sept 25–May 23	241	41.0	5796	— 3
Pueblo*	Sept 17–May 31	257	42.8	5709	—14
CONNECTICUT					
Bridgeport*	Sept 19–Jun 5	260	42.3	5896	— 1
Hartford*	Sept 12–Jun 2	264	41.7	6139	— 2
New Haven*	Sept 14–Jun 8	268	42.5	6026	0
DELAWARE					
Wilmington*	Sept 27–May 19	235	44.1	4910	0
DISTRICT OF COLUMBIA					
Washington	Oct 2–May 12	223	45.9	4258	10
FLORIDA					
Jacksonville	Nov 10–Mar 21	132	56.6	1113	28
Miami	Dec 4–Mar 13	100	63.3	173	35
Pensacola	Nov 3–Apr 2	151	55.5	1435	24
Tampa*	Dec 1–Mar 3	93	57.8	674	36
GEORGIA					
Atlanta	Oct 14–Apr 25	194	50.5	2811	11
Augusta*	Oct 23–Apr 12	172	52.6	2138	20
Macon*	Oct 23–Apr 9	169	52.9	2049	20
Savannah*	Oct 28–Apr 9	164	54.6	1710	24
IDAHO					
Boise*	Sept 9–Jun 12	277	43.7	5890	—10
Lewiston*	Sept 13–Jun 8	269	44.6	5483	—12
Pocatello*	Sept 4–Jun 20	290	40.9	6976	—17
ILLINOIS					
Cairo	Oct 11–Apr 29	201	46.3	3756	0
Chicago*	Sept 21–May 29	251	39.9	6310	—11
Peoria*	Sept 22–May 27	248	40.5	6087	—13
INDIANA					
Evansville*	Oct 4–Jun 15	255	47.9	4360	— 4
Fort Wayne*	Sept 18–May 30	255	40.3	6287	— 7
Indianapolis	Oct 2–May 18	229	42.6	5134	— 8
Terre Haute*	Sept 28–May 20	235	42.2	5366	— 6
IOWA					
Charles City	Sept 10– May 31	264	36.6	7504	—21
Davenport	Sept 24– May 21	240	39.6	6091	—12
Des Moines	Sept 23– May 23	243	39.2	6274	—13
Sioux City*	Sept 16– May 26	253	37.3	7012	—16
KANSAS					
Concordia	Oct 2–May 19	230	41.9	5323	—11
Dodge City	Oct 2–May 20	231	43.1	5058	— 9
Topeka	Oct 4–May 13	222	42.8	4919	— 8
Wichita*	Oct 7–May 14	220	44.2	4571	— 6
KENTUCKY					
Bowling Green*	Oct 4–May 16	225	46.0	4279	2
Lexington*	Oct 1–May 21	233	43.6	4979	— 2
Louisville	Oct 6–May 10	217	45.3	4279	— 2
LOUISIANA					
New Orleans	Nov 10–Mar 24	135	56.3	1175	26
Shreveport*	Oct 26–Apr 6	163	52.0	2117	14
MAINE					
Eastport	.....	365	42.4	8246	— 9
Portland*	Aug 27–Jun 25	303	39.7	7681	— 9
MARYLAND					
Baltimore	Sept 8–May 13	248	48.1	4203	8
MASSACHUSETTS					
Boston*	Sept 17–Jun 5	262	42.9	5791	0
MICHIGAN					
Alpena	Aug 25–Jun 25	305	38.5	8073	—10
Detroit*	Sept 17–Jun 2	259	40.3	6404	— 4
Escanaba	Aug 22–Jun 27	310	37.1	8657	—18
Grand Haven	Aug 31–Jun 19	293	41.4	6915	— 3
Grand Rapids	Sept 16–Jun 2	260	40.1	6474	— 4
Houghton	Aug 9–Jul 6	332	38.0	8964	—18
Lansing*	Sept 9–Jun 3	268	38.9	6982	— 8
Marquette	Aug 24–Jul 1	312	37.7	8529	—16
Sault Ste. Marie*	Aug 8–Jul 15	342	37.3	9475	—19
MINNESOTA					
Duluth	Aug 21–Jul 5	319	35.3	9474	—27
Minneapolis*	Sept 11–May 31	263	35.1	7853	—23
Moorhead	Aug 23–Jun 16	298	34.0	9315	—29
St. Paul*	Sept 11–Jun 1	264	35.4	7804	—23
MISSISSIPPI					
Meridian*	Oct 17–Apr14	180	52.0	2333	14
Vicksburg	Oct 26–Apr 8	165	52.9	2000	15
MISSOURI					
Columbia*	Sept 29–May 17	231	42.9	5113	— 9
Hannibal	Sept 24–May 29	239	43.1	5248	—12
Kansas City*	Oct 5–May 12	220	42.8	4888	— 8
St. Louis	Oct 8–May 10	215	44.2	4469	— 5
Springfield*	Oct 1–May 19	231	44.7	4693	— 5

Outside design temperature given is that which is likely to recur once every 13 years as the minimum daily mean temperature.

Location	Heating Season	Heating Days	Ave. Mean Temp, F	Degree-Days	Outside Design Temp, F
MONTANA					
Billings*	Sept 4–Jun 16	286	40.2	7106	−31
Havre	Aug 29–Jun 22	298	37.4	8213	−39
Helena	Aug 20–Jul 3	318	39.4	8126	−39
Kalispell*	Aug 17–Jul 5	323	40.1	8055	−31
Miles City*	Sept 7–Jun 13	280	37.1	7822	−35
NEBRASKA					
Lincoln	Sept 27–May 21	237	40.3	5865	−15
North Platte*	Sept 15–Jun 1	260	39.8	6546	−15
Omaha*	Sept 24–May 20	239	39.2	6160	−17
Valentine	Sept 12–Jun 5	267	38.5	7075	−21
NEVADA					
Reno*	Sept 4–Jun 26	296	44.6	6036	3
Winnemucca*	Sept 4–Jun 17	287	42.8	6369	− 9
NEW HAMPSHIRE					
Concord*	Aug 29–Jun 15	291	38.8	7612	−11
NEW JERSEY					
Atlantic City	Sept 29–May 30	244	45.6	4741	− 8
Elizabeth	Sept 20–May 24	247	43.5	5302	2
New Brunswick	Sept 17–May 30	256	43.9	5404	4
Plainfield	Sept 16–Jun 1	259	43.6	5535	4
Somerville	Sept 18–May 29	254	43.1	5586	2
Trenton	Sept 25–May 21	239	43.8	5068	2
NEW MEXICO					
Albuquerque*	Oct 3—May 12	222	45.2	4389	8
Roswell*	Oct 8–May 3	208	48.5	3424	4
Santa Fe	Sept 1–Jun 15	287	43.9	6063	3
NEW YORK					
Albany	Sept 15–May 28	256	40.3	6319	− 9
Binghamton*	Aug 30–Jun 16	291	39.1	7537	− 7
Buffalo*	Sept 10–Jun 9	273	40.0	6838	− 5
Ithaca	Sept 4–Jun 9	279	40.9	6719	− 4
New York	Sept 28–May 26	241	44.0	5050	5
Oswego	Sept 9–Jun 15	280	40.1	6975	− 7
Rochester*	Sept 9–Jun 6	271	39.7	6863	− 4
Syracuse*	Sept 13–Jun 2	263	40.2	6520	−10
NORTH CAROLINA					
Asheville	Sept 29–May 19	233	47.5	4072	5
Charlotte*	Oct 9–Apr 30	204	49.3	3205	14
Hatteras	Oct 23–May 3	193	52.6	2392	21
Raleigh	Oct 12–May 1	202	49.8	3075	14
Wilmington*	Oct 19–Apr 24	188	52.6	2323	20
NORTH DAKOTA					
Bismarck*	Aug 31–Jun 16	290	33.9	9033	−31
Devils Lake	Aug 27–Jun 22	300	31.9	9940	−32
Grand Forks	Aug 15–Jun 23	313	33.8	9764	−31
Williston	Sept 1–Jun 19	292	33.9	9068	−35
OHIO					
Cincinnati	Oct 4–May 14	223	44.7	4532	− 3
Cleveland	Sept 23–May 29	249	42.0	5717	− 5
Columbus	Sept 27–May 22	238	42.8	5277	− 3
Dayton*	Sept 25–May 25	243	42.0	5597	− 4
Sandusky	Sept 23–May 29	249	41.5	5859	− 4
Toledo*	Sept 16–May 31	258	40.2	6394	− 5
OKLAHOMA					
Oklahoma City	Oct 16–Apr 27	194	46.9	3519	− 1
OREGON					
Baker	Aug 25–Jul 4	314	42.4	7087	−14
Portland	Sept 16–Jun 18	276	50.0	4143	10
Roseburg	Sept 13–Jun 19	280	50.3	4122	19
PENNSYLVANIA					
Erie	Sept 20–Jun 4	258	41.3	6116	− 3
Harrisburg*	Sept 22–May 20	241	43.2	5258	4
Philadelphia	Oct 2–May 17	228	45.2	4523	6
Pittsburgh	Sept 28–May 19	234	43.4	5048	− 3
Reading	Sept 26–May 21	238	43.7	5060	3
Scranton	Sept 15–May 30	258	41.6	6047	− 2
RHODE ISLAND					
Block Island*	Sept 13–Jun 19	280	44.1	5843	7
Providence	Sept 18–Jun 1	257	43.2	5607	1
SOUTH CAROLINA					
Charleston	Oct 28–Apr 10	165	54.3	1769	22
Columbia	Oct 19—Apr 17	181	52.4	2284	19
SOUTH DAKOTA					
Huron*	Sept 12–Jun 3	265	29.8	7902	−21
Pierre	Sept 4–Jun 17	287	39.2	7420	−22
Rapid City*	Sept 5–Jun 17	286	26.3	7535	−22
TENNESSEE					
Chattanooga*	Oct 8–May 4	209	48.8	3384	8
Knoxville*	Oct 8–May 4	209	47.8	3590	5
Memphis	Oct 19–Apr 22	186	48.8	3006	6
Nashville*	Oct 11–May 2	204	47.8	3513	3
TEXAS					
Abilene*	Oct 22–Apr 14	175	49.8	2657	7
Amarillo*	Oct 2–May 17	228	45.9	4345	− 2
Corpus Christi*	Nov 15–Mar 15	121	56.6	1011	23
Dallas*	Oct 27–Apr 6	162	51.0	2272	8
El Paso*	Oct 19–Apr 19	183	50.6	2641	20
Fort Worth*	Oct 27–Apr 10	166	50.8	2361	8
Galveston	Nov 13–Mar 29	137	56.2	1211	23
Houston	Nov 8–Mar 25	138	55.8	1276	19
Palestine	Oct 30–Apr 7	160	52.6	1980	11
San Antonio*	Nov 5–Mar 29	145	54.1	1579	19
UTAH					
Salt Lake City	Sept 20–May 29	252	43.3	5463	− 1
VERMONT					
Burlington*	Sept 3–Jun 10	281	37.0	7865	−17
Northfield	Aug 8–Jul 1	328	38.6	8719	−19
VIRGINIA					
Cape Henry	Oct 12–May 12	213	49.5	3307	17
Lynchburg*	Sept 29–May 12	226	46.6	4153	11
Norfolk	Oct 13–May 7	207	49.9	3119	15
Richmond	Oct 6–May 9	216	47.8	3720	11
Wytheville	Sept 13–Jun 2	263	45.9	5022	3
WASHINGTON					
Seattle*	Aug 28–Jul 2	309	50.6	5275	15
Spokane*	Aug 31–Jun 27	301	42.2	6852	−16
Tacoma	Aug 13–Jul 9	331	50.3	4866	15
Tatoosh Island	.....	365	49.3	5724	18
Walla Walla	Sept 20–May 27	250	45.6	4848	−12
WEST VIRGINIA					
Elkins*	Sept 12–Jun 6	268	43.5	5773	− 4
Parkersburg	Sept 30–May 18	231	44.4	4750	− 1
WISCONSIN					
Green Bay*	Sept 2–Jun 12	284	35.9	8259	−20
La Crosse*	Sept 10–May 31	264	36.0	7650	−20
Madison	Sept 13–Jun 3	264	37.3	7300	−19
Milwaukee	Sept 15–Jun 12	271	39.4	6944	−17
WYOMING					
Cheyenne*	Aug 26–Jun 28	307	40.4	7562	−19
Lander*	Aug 29–Jun 22	298	37.1	8303	−30
Yellowstone Park	.....	365	38.8	9554	−34

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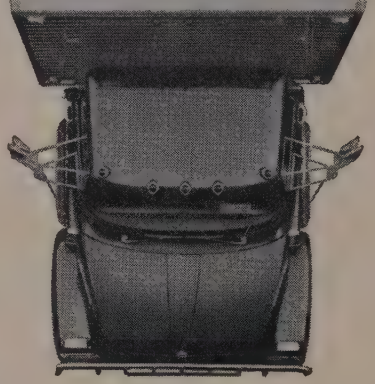

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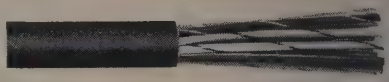

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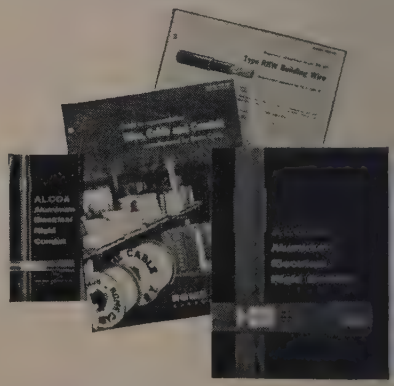

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COMPANY & TRADE NAMES

Alphabetical listing of company names, trade names and addresses

The following listing contains

1. Company names, with complete addresses.
2. Company trade names, in capital letters for easy reference.
3. Other names by which companies may be or may have been known, cross-referenced to present company.

Trade names are listed solely on the basis of information supplied by the manufacturer and are not guaranteed to be registered or the exclusive property of the manufacturer concerned.

A

A B C—Columbia Cable & Electric Corp
A C Transformer Corp 89 Madison St Newark NJ
ACF—Atlantic Conduit Fittings Co
ACF Industries Inc ACF Electronics Div Riverdale Md
ACI—American Coils Co
A C L—Columbia Cable & Electric Corp
ACW—American Creosote Works Inc
ADT Co—see American District Telegraph Co
A E Industrial Div Aircraft Armaments Inc P O Box 6853 Baltimore 4 Md
AECO—American Electric Cable Co
AFCO—Alhambra Foundry Co Ltd
AFS—AutoFYRstop Co
AG—Farrelloy Co
AGA Div Elastic Stop Nut Corp—see Elastic Stop Nut Corp of America
A H—Arrow-Hart & Hegeman Electric Co
A J F Industries Inc—see Atlantic Transformer Div
A-MAL-GAM—Smith Welding Equipment Corp
AMCO—American Solder & Flux Co
AMP Inc Eisenhower Blvd Harrisburg Pa
A1 Audio Engineers—see O'Brien Electric Corp
AOW Corp 450 N Ninth St Elwood Ind
A-P Controls Corp—see Controls Co of America
APAC—Keasbey & Mattison Co
APCO—Aurora Pump Div New York Air Brake Co
APM Corp 41 Honeck St Englewood NJ
A-R—Aitken-Reed Inc
A & R—Air & Refrigeration Corp
A-S—Allen-Stevens Conduit Fittings Corp
ASCO—Automatic Switch Co
ASMC—Farrelloy Co
ATI—Alexander-Tagg Industries Inc
A W H Co—see Haydon (A W) Co
A-Z—Plastic Wire & Cable Corp
ABELCOR—O'Brien Electric Corp
ABOGLAS—Natvar Corp
Abolite Lighting Div Jones Metal Products Co West Lafayette Ohio
ABR-A-SAW—Collins Machinery Corp
Abrams Instrument Corp 606 E Shiawasee St Lansing Mich
Abrams Lighting 785 Schuylkill Ave Philadelphia 46 Pa
ABSORB-A-SHOCK—Federal Shock Mount Corp
ACCOLITE—Accurate Insulated Wire Corp
ACCORDION—Pullman Vacuum Cleaner Corp
ACCPRENE—Accurate Insulated Wire Corp
ACCTHERM—Accurate Insulated Wire Corp
Accurate Engineering Co 2005 Blue Island Ave Chicago 8 Ill
Accurate Insulated Wire Corp 25 Fox St New Haven 13 Conn
Accurate Mfg Co 6 Hepworth Place Garfield NJ
ACCWIRE—Accurate Insulated Wire Corp
ACE—Armature Coil Equipment Inc
ACE—Arro Expansion Bolt Co
ACE—Peer Inc
Ace Lighting Products Co 171 Broad St SW Atlanta 3 Ga
ACE-PIER—Peer Inc
ACHESON—National Carbon Co
ACHROMATIC—Keystone Electric Mfg Co
ACID-CAUSTIC BAND—Wilbur & Williams Co
Ackerman-Johnson Co 625 W Jackson Blvd Chicago 6 Ill
ACME—Co-operative Utilities Co Inc
ACME—McCaffrey Mfg & Supply Co
Acme Electric Corp 45 Water St Cuba NY
Acme Electric Heating Co—see Acme Electric Heating Corp
Acme Electric Heating Corp 99 Reading St Boston 19 Mass
Acme Fire Alarm Company Inc 106 Seventh Ave New York 11 NY
Acme Industries Inc 620 N Mechanic St Jackson Mich
Acme Lighting & Mfg Co 949 E 31 St Los Angeles 11 Calif
Acme Lite Products Co Inc Congers NY
Acme Mfg & Gasket Co 738 N 41 St Phila 4 Pa
Acme Steel Co 135th St & Perry Ave Chicago 27 Ill
Acme Welded Pipe & Coil Co—see Acme Industries Inc
Acme Wire Co Utility Products Div 1255 Dixwell Ave New Haven Conn
Acorn Insulated Wire Co 36 Freeman St Pawtucket RI
Acoustica Associates Inc 10400 Aviation Blvd Los Angeles 45 Calif
ACOUSTILITE—Neo-Ray Products Inc
Acra Electric Corp 9901 Pacific Ave Franklin Park Ill
Acra Industrial Electric Co—see Acra Electric Corp
ACRAWATT—Acra Electric Corp
ACRI-LUMINUS—Luminous Ceilings Inc
ACRO-ARC—Acro Welder Mfg Co
ACRO-ETCH—Acromark Co
ACRO-LITE—Acro Switch Div
ACRO-MAGNETIC—Acro Welder Mfg Co
ACRO SWITCH—Acro Switch Div
Acro Mfg Co—see Acro Switch Div
Acro-Mu Switch Div—see Acro Switch Div
Acro Switch Div Robertshaw-Fulton Controls Co 2040 E Main St Columbus 16 Ohio
Acro Welder Mfg Co 1719 W St Paul Ave Milwaukee 3 Wis
ACROLEAF—Acromark Co
Acromark Co 320 Morrell St Elizabeth 4 NJ
ACROMARKER—Acromark Co
ACROMATIC—Acro Welder Mfg Co
ACRYLENS—Lightolier Inc
Active Specialty Corp Elm St Walden NY
ACTOGRAP—Newage Industries Inc
ACUSTI-LUMINUS—Luminous Ceilings Inc
Adalet Mfg Co 14300 Lorain Ave Cleveland 11 Ohio
ADALOY—Adams Engineering Co
Adam (Frank) Electric Co 3647 Windsor Pl St Louis Mo
Adams Engineering Co 31711 Solon Rd Solon Ohio
ADAPT-A-LITE—Cable Electric Products Inc
ADAPT-O-MOUNT—Overly-Hautz Co
ADAPTA-STUD—Tomic Sales & Engineering Co
ADAPTABEL—Edwards Co Inc
ADAPTALITE—MiroFlector Co Inc
ADAPTOMATIC—Fedders Corp
Adcrafters Co 325 W Huron St Chicago 10 Ill
ADD-A-BREAKER—Westinghouse Electric Corp
ADD-A-CALL—Simpson (Mark) Mfg Co Inc
ADD-A-PHASE—System Analyzer Corp
ADD-A-POINT—Wama Co
ADD-A-SHELF—Alpha Wire Corp
ADD-A-TIER—Bernard-Franklin Co Inc
ADD-A-UNIT—Blonder-Tongue Laboratories Inc
ADDA-STRIP—Garcy Lighting Div
ADDAPLUG—Associated Engineering Corp
ADJUSCO—Adjustable Fixture Co
ADJUSCO-LOC—Adjustable Fixture Co.
ADJUST-A-VOLT—Standard Electrical Products Co
ADJUST-ANGLE—Weksler Instruments Corp
ADJUST-O-LITES—Litecraft Mfg Co
ADJUST-O-SPOTS—Litecraft Mfg Co
ADJUSTA-LAMP—Adjusta Post Mfg Co
Adjusta Post Mfg Co 908 St Clair St Akron 7 Ohio
ADJUSTA-PULLEY—Watteredge Co
Adjustable Fixture Co 104 E Mason St Milwaukee 2 Wis
ADJUSTAT—Smith-Gates Corp
ADJUSTO-DECK—Haertel (Walter) Co
ADJUSTO-SLIDE—American Pulley Co
ADJUSTOHM—Ward Leonard Electric Co
Adre Co 8980 W Hawthorne Lane Hales Corners 3 Wis
ADVAN-GUARD—Advance Transformer Co
ADVANCE—Beaver-Advance Corp
ADVANCE—Elgin National Watch Co
Advance Transformer Co 2950 N Western Ave Chicago 18 Ill
ADVENTURER—York Div
Aemco Inc 10 State St Mankato Minn
AERO—American District Telegraph Co
AERO FAN—Emerson-Pryne Co
Aero Instrument Co 11423 Vanowen St North Hollywood Calif
AERO-MAGNETTE—Heinemann Electric Co
Aero-Motive Mfg Co 1803 Alcott St Kalamazoo 24 Mich
AERODYNE—Jeffrey Mfg Co
Aeroil Products Co Inc 69 Wesley St South Hackensack NJ
Aerolux Electric Lamp Corp—see Aerolux Lights Corp
Aerolux Lights Corp 653 11th Ave NY 36 NY
AEROLYTE—Lightolier Inc
AEROMAC—Seely Instrument Co Inc
Aerovent Fan Co Inc Ash and Block Sts Piqua Ohio
Aetra Motor Products Co—see Pollak (Joseph) Corp
Afco Lite Corp 1378 N Wolcott Chicago 22 Ill
AFTER-GLOW—Perfeclite Co
AGASTAT—Elastic Stop Nut Corp of America
AGASWITCH—Elastic Stop Nut Corp of America
AGLITES—Guth (Edwin F) Co
Ahlberg Bearing Co 3025 W 4th St Chicago 32 Ill
AIM BRAND—Acme Steel Co
Ainsworth Lighting Inc 38-10 Twenty-Ninth St LIC 1 NY
AIR CONTROL—Hastings Air Conditioning Co Inc
Air Controls Inc 2310 Superior Ave Cleveland 14 Ohio
AIR-FLOW—Matthews Electric Heater Mfg Co
Air-Hydraulics of Indiana—see Industrial Electric Switches of Indiana
AIR KING—Berns Air King Corp
Air-Marine Motors Inc 369 Bay View Ave Amityville NY
AIR MOVER—Mine Safety Appliances Co
Air & Refrigeration Corp 439 Madison Ave New York NY
AIR-ROL—Rollway Bearing Co Inc
AIRBOY—Mitchell Industries Inc
Aircraft Marine Products Inc—see AMP Inc
Aircraft Specialties Inc 415 Howard St Lapeer Mich
AIRE-RECTIFIER—Larco Inc
Airfan Engineering Co 7401 Telegraph Rd Los Angeles 22 Calif
AIRLUX—Sun-Lite Mfg Co
AIRMASTER—Haertel (Walter) Co.
AIRMPELER—Ammerman Co Inc
AIRSEAL—Kearney (James R) Corp
Airserco Mfg Co Inc 435 Melwood St Pittsburgh 13 Pa
AIRSPREAD—Hunter Div
AIRSWEEP—Progress Mfg Co Inc
Airtemp Div Chrysler Corp 1600 Webster St Dayton 1 Ohio
AIRTROL—Reeves Pulley Div Reliance Electric & Engineering Co
AIRXPELER—Ammerman Co Inc
Aitken-Reed Inc 2802 Wollmer St Manitowac Wis
AJAX—Ceilheat Inc
AJAX—Security Insert Co
AJAX—Sherwin-Williams Co
AJAX-ANKERSEN—Ajax Electric Co
Ajax Electric Co 954 Frankford Ave Phila 23 Pa
Ajax Magnethermic Corp 3990 Simon Rd Youngstown 1 Ohio
AJAXOMATIC—Ajax Magnethermic Corp
ADJUSTO-BRAKE—Dynamic Div Eaton Mfg Co
AJUSTO-SPEDE—Dynamic Div Eaton Mfg Co
AKRA-OHM—Shallcross Mfg Co
ALABAX—Pass & Seymour Inc
ALADDIN—New England Carbide Tool Co Inc
ALASKAN—National Engineering & Mfg Co
ALBA-LITE—Corning Glass Works
ALBANY—Cooks Sons (Adam) Inc
Albertson & Co Inc 2999 Floyd Blvd Sioux City Iowa
ALCOA—Aluminum Co of America
Alcor Mfg Co 1140 S Seventh St De Kalb Ill
ALDUTI—S & C Electric Co
ALECTRAL—General Cable Co
ALEXALL—American Biltrite Rubber Co
Alexander-Tagg Industries Inc Jacksonville Road at Summit Ave Hatboro Pa
Alexander-Towle Industries—see Alexander-Tagg Industries Inc
ALGCO—Auburn Mfg Co
Alhambra Foundry Co Ltd 1147 Meridian Ave Alhambra Calif
ALISCO—Allen Iron & Steel Co
ALISPEDE—Allis (Louis) Co
Alk Co—see Alkco Mfg Co
Alkco Mfg Co 4242 N Lincoln Ave Chicago 18 Ill
ALKENEX—General Electric Co
ALL-BRITE—Fluorescent Fixtures of California
All-Brite Light Co 400 S 12 St Reading Pa
ALL-MOTOR—Falk Corp
ALL-RADIANT—Ampere Industries
ALL SQUARE—Guth (Edwin F) Co
All-State Welding Alloys Co Inc 249-55 Ferris Ave White Plains NY
All-Steel Equipment Inc Aurora Ill
ALL-VISION—Mine Safety Appliances Co
ALL-WEATHER—Duro-Test Corp
ALL WEATHER—Michigan Fluorescent Light Div
ALL-WEATHER—Mine Safety Appliances Co
ALL-WEATHER—Robbins & Myers Inc
Allegheny Plastics Inc Rt 51 & Thorn Run Rd Coraopolis Pa
ALLEN—Excel Electric Service Co Inc
ALLEN—Lint (Clyde W)
Allen (L B) Co Inc 173-AF 5624 N Newark at Bryn Mawr Chicago 31 Ill
Allen-Bradley Co 136 W Greenfield Ave Milwaukee 4 Wis
Allen Cooler & Ventilator Inc 704 Woodward St Rochester Mich
Allen Electric and Equipment Co 2101-2117 N Pitcher St Kalamazoo Mich
Allen Iron & Steel Co P O Box 550 Norristown Pa
Allen-Stevens Conduit Fittings Corp 33-53 62nd St Woodside 77 NY
Allen Ventilation Div—see Allen Cooler & Ventilator
Alliance Mfg Co Inc Lake Park Blvd Alliance Ohio
Allied Industries Inc P O Box 119 Ogallala Neb
Allied Lightning Protection—see Security Mfg & Contracting Co
Allied Mfg & Sales Co 3101 W Grand Ave Chicago 22 Ill
Allied Metal Stamping Co 1475 S 6th St Camden 4 NJ
Allied Precision Industries 425 Stevens St (P O Box 149) Geneva Ill
ALLIGATOR—Porcelain Products Inc
ALLIGATOR JAW—Anderson (Albert & JM) Mfg Co
Allis (Louis) Co 427 E Stewart St Milwaukee 1 Wis
Allis-Chalmers Mfg Co 6930 S 70th St Milwaukee 1 Wis
ALLISPEDE—Allis (Louis) Co
Allmetal Engineering Inc 1003 S Date Ave Alhambra Calif
ALMAG—Alpha Wire Corp
Almo Mfg Co Inc 618 Jersey Ave Union Beach NJ
ALNICO—Crucible Steel Co of America
ALPHA—Trombetta Solenoid Corp
Alpha Metals Inc 60C Water St Jersey City 4 NJ
Alpha Wire Corp 200 Varick St New York 14 NY
Alphaduct Wire & Cable Co 25 Van Dyke Ave (P O Box 709) New Brunswick NJ
ALPHLEX—Alpha Wire Corp
ALTEMP—Alpha Wire Corp
ALTERNAC—Electric Arc Inc
ALTIMATIC—Air-Marine Motors Inc
ALU-FLEX—Auburn Mfg Co
ALUMALET—Killark Electric Mfg Co
ALUMALLOY—Killark Electric Mfg Co
ALUMATIC—Rich (Phil) Fan Mfg Co Inc
ALUMAWELD—Johnson Mfg Co Inc
ALUMI-DONE—Globe Lighting Products Inc
ALUMILIFT—Round (David) & Son Inc
ALUMINAIRES—McPhilben Mfg Co Inc
Aluminum Co of America 1501 Alcoa Bldg Pittsburgh 19 Pa
ALUMOWELD—Copperweld Steel Co
Alwalt Mfg Co Inc 1706 Lapham Dr (P O Box 1171) Modesto Calif
AMADCO—Associated Manufacturers & Distributors Corp
AMAIRCELL—American Electric Cable Co
AMARINE—American Steel & Wire Div
AMAZALOY—All-State Welding Alloys Co Inc
AMCODRUMS—Art Metal Lighting Div
AMCOLENS—Art Metal Lighting Div
AMER X—American Insulated Wire Corp
AMERAP—American Electric Cable Co
AMERBESTOS—American Steel & Wire Div United States Steel Corp
AMERCLAD—American Steel & Wire Div
AMERCORD—American Steel & Wire Div
AMEREX—Leviton Mfg Co Inc
AMERFLEX—American Flexible Conduit Co Inc
AMERICAN BEAUTY—American Electrical Heater Co
American Biltrite Rubber Co Boston Woven Hose & Rubber Div 29 Hampshire St Cambridge Mass
American Blower Corp—see American-Standard
American Blower Div American-Standard—see American-Standard Industrial Division
American Coach & Body Co—see McCabe-Powers Body Co
American Coils Co Route 524—Lakewood Rd Farmingdale NJ

American Concrete Corp 5092 N Kimberly Ave Chicago 30 Ill
American Coolair Corp 3604 Mayflower St (P O Box 2300) Jacksonville 3 Fla
American Creosote Works Inc 1305 Dublin St (Box 4008) New Orleans 18 La
American Crossarm and Conduit Co 7726 Sheridan Rd Chicago 26 Ill
American District Telegraph Co 155 Sixth Ave NY 13 NY
American Electric Cable Co 181 Appleton St Holyoke Mass
American Electric Motors Inc—see American Electronics Inc
American Electric Switch Corp—see American Electric Switch Div
American Electric Switch Div Clark Controller Co 1146 E 152 St Cleveland 10 Ohio
American Electrical Heater Co 6110 Cass Ave Detroit 2 Mich
American Electronic Mfg Inc—see American Electronics Inc
American Electronics Inc 655 W Washington Blvd Los Angeles 15 Calif
American Engineering Co—see A E Industrial Div Aircraft Armaments Inc
American Flexible Conduit Co Inc 969 Shawmut Ave New Bedford Mass
American Floor Machine Co 518 S St Clair St Toledo 3 Ohio
American Gas Accumulator Co—see Elastic Stop Nut Corp of America
American Hard Rubber Co Ace Rd Butler NJ
American Insulated Wire Corp 36 Freeman St Pawtucket RI
American Louver Co 5308 N Elston Ave Chicago 30 Ill
American Lumber & Treating Co—see Koppers Co Inc
American Metal Hose Div—see Anaconda Metal Hose Div
American Metal Moulding Co 146 Coit St Irvington NJ
American Pipe Bending Machine Co Inc Poultney Vt
American Pipe Tool Co 4856 W Kinzie St Chicago 44 Ill
American Products Mfg Co Inc 8127-33 Oleander St New Orleans 18 La
American Pulley Co 4200 Wissahickon Ave Phila 29 Pa
American Rectifier Corp 95 Lafayette St NY 13 NY
American Sealants Co 705 N Mountain Rd Hartford 11 Conn
American Sentry Inc 84 Bethlehem Pike Philadelphia 18 Pa
American Silver Co Inc Industrial Div 36-07 Prince St Flushing 54 NY
American Solder & Flux Co 19th & Willard Sts Phila 40 Pa
American-Standard Controls Div 5900 Trumbull Ave Detroit 8 Mich
American-Standard Industrial Div Detroit 32 Mich
American Steel & Iron Works 5801 S Lowe Ave Chicago 21 Ill
American Steel & Wire Div United States Steel Corp Rockefeller Bldg Cleveland 13 Ohio
American Super-Temperature Wires Inc Winooski Vt
American Tool & Engineering 2105 Moore St San Diego Calif
American Transom Co—see Security Insert Co
American Vacuum Co 8100 North Ridgeway Skokie Ill
AMERICANA—Project Fixture Mfg Corp
AMERLOK—American Steel & Wire Div United States Steel Corp
AMERPLASTIC—American Electric Cable Co
AMERPRENE—American Insulated Wire Corp
AMERPRENE—Leviton Mfg Co Inc
AMERSHIELD—American Electric Cable Co
AMERTHERM—American Insulated Wire Corp
AMERTROL—American Insulated Wire Corp
AMERY—American Insulated Wire Corp
AMETALLIC—American Steel & Wire Div
Ammerman (CL) Co—see Ammerman Co Inc
Ammerman Co Inc P O Box 182 Stillwater Minn
AMP-FRA-LITE—Ampere Industries
AMP-QUARTZ—Ampere Industries
AMP-TRAP—Chase-Shawmut Co
Ampere Industries 60 Boston St Newark 3 NJ
Amperite Co Inc 561 Broadway NY 12 NY
Amplex Corp Glen Cove Rd Carle Place Long Island NY
Amplex Div Chrysler Corp P O Box 2718 Detroit 31 Mich
Amplex Mfg Co—see Amplex Div
AMPLI-SPEED—Electric Machinery Mfg Co
AMPLICALL—Rauland-Borg Corp
AMPLITROL—Thermolyne Corp
Amprobe Instrument Corp 630 Merrick Rd Lynbrook NY
AMPROBE JR—Amprobe Instrument Corp
Anaconda Metal Hose Div Anaconda American Brass Co P O Box 791 Waterbury 20 Conn
Anaconda Wire & Cable Co 25 Broadway New York 4 NY
ANACONDALOY—Anaconda Wire & Cable Co
ANALAC—Anaconda Wire & Cable Co
Anchor Mfg Co P O Box 959 Manchester NH
Anchor Metal Co Inc 966 Meeker Ave Brooklyn 22 NY
Anchor Packing Co 401 N Broad St Philadelphia 8 Pa
ANDER-CRIMP—Anderson Electric Corp
Anderson Brass Works—see Anderson Electric Corp
Anderson (A F) Iron Works—see American Steel & Iron Works
Anderson (Albert & JM) Mfg Co 289 A St Boston 10 Mass
Anderson Electric Corp P O Drawer 2151 Birmingham 1 Ala
ANHYDREX—Simplex Wire & Cable Co
ANHYDROPRENE—Simplex Wire & Cable Co
ANKOPRENE—Anchor Packing Co
ANKORITE—Anchor Packing Co
ANKOSEAL—Ansonia Wire & Cable Co
Annis (R B) Co 1101 N Delaware St Indianapolis 2 Ind
ANNOUNCEMAT—Recora Co Inc
ANNULITE—Rambusch Decorating Co
ANNUNCIETTE—Edwards Co Inc
ANOZINC—Metal & Thermit Corp
Ansonia Electrical Co—see Ansonia Wire & Cable Co
Ansonia Wire & Cable Co 111 Martin St Ashton RI
ANTENAPLEX—Radio Corp of America
ANTENSIFIER—Blonder-Tongue Laboratories Inc
Anthony (F M) Co 773 University Ave Berkeley 10 Calif
ANTI-ARC—Palmer Electric & Mfg Co
ANTI-KORODE—Arsco Mfg & Sales Corp
Apex Bolt Products Co 452-458 N Claremont Ave Chicago 12 Ill
Apex Wire & Cable Corp 237 37th St Brooklyn 32 NY
Apollo Lighting Fixture Co Inc 162 W Third St Mt Vernon NY
Appleton Electric Co 1701-59 Wellington Ave Chicago 13 Ill
Appleton Rubber Co Inc 57 Cornwall St Boston 30 Mass
AQUA-TEMP—Acra Electric Corp
AQUALUX—Luxor Lighting Products Inc
AQUASORB—Turco Products Inc
AQUATHENE—General Cable Corp
ARC-ESCENT—Luxor Lighting Products Inc
Arco Mfg Co 1701 13th Ave North (Box 817) Grand Forks ND
ARCO WAND—American Vacuum Co
ARCTROL—Mullenbach Div
AREALENS—Art Metal Co
AREALUX—Lighting Products Inc
Arex Co 612 N Michigan Ave Chicago 11 Ill
AREX-AUSTOR—Arex Co
Argo Sales Co—see Argo Products Co
Argo Products Co 3500 Goodfellow St Louis 20 Mo
Aries Laboratories Inc 45-33 Davis St Long Island City 1 NY
ARIN—Arex Co
ARISTOCRAT—Cellheat Inc
ARISTOLITE—Guth (Edwin F) Co
ARITEMP—Aries Laboratories Inc
Arjac Products Inc 55-59 Halstead St Rochester 10 NY
Ark-les Switch Corp 51 Water St Watertown Mass
ARK-TROL—Crouse-Hinds Co
ARKLESS—Economy Fuse Div
ARKTITE—Crouse-Hinds Co
Arlavox Mfg Co—Radionic Transformer Co
ARMAKOTE—Hatfield Wire & Cable Div Continental Copper & Steel Indus Inc
Armature Coil Equipment Inc 2605 Vega Ave Cleveland 13 Ohio
ARMATURO—Johns-Manville
ARMITE—Spaulding Fibre Co Inc
ARMO-LOK—Phelps Dodge Copper Products Corp
ARMOR-GRIP—Preformed Line Products Co
Armstrong-Bray & Co 5366 Northwest Highway Chicago 30 Ill
Armstrong Bros Tool Co 5200 W Armstrong Ave Chicago 46 Ill
ARRO-CORE—Arro Expansion Bolt Co
Arro Expansion Bolt Co P O Box 388 Marion Ohio
ARROFLUTE—Arro Expansion Bolt Co
Arrolet Corp Foot of Bower St Montgomery Pa
ARROVAL—Arrolet Corp
ARROW—Arrow-Hart & Hegeman Electric Co
Arrow Conduit & Fittings Corp 108-20 180th St Jamaica 33 NY
Arrow Electric—see Arrow-Hart & Hegeman Electric Co
Arrow Fastener Co Inc 1 Junius St Brooklyn 12 NY
Arrow-Hart & Hegeman Electric Co 103 Hawthorn St Hartford 6 Conn
Arrow Lamps Inc 1270 Broadway New York 1 NY
Arsco Mfg & Sales Corp 438 Tenth Ave New York 1 NY
Art Metal Co—see Art Metal Lighting Div
Art Metal Lighting Div Wakefield Corp 1814 E 40 St Cleveland 3 Ohio
Art Specialty Co 3720 N Milwaukee Ave Chicago 41 Ill
Artcraft Fluorescent Corp—see Artcraft Lighting Co Inc
Artcraft Lighting Co Inc 248 McKibben St Brooklyn 6 NY
ARTIC—Yardney Electric Corp
Artistic Lamp Mfg Co Inc 109 Eighth St Passaic NJ
Artolier Corp 141 Lanza Ave Garfield NJ
Artos Engineering Co 2757 S 28 St Milwaukee 46 Wis
Arvin Industries Inc Columbus Ind
ASARCOLO—Federated Metals Div
ASBESTICA—Johns-Manville
ASBESTITE—Burndy Corp
ASBESTOMENT—Johns-Manville
ASBESTON—United States Rubber Co
ASBESTOS EBONY—Johns-Manville
ASCOT—Pollak Luminescent Corp
Asheville-Schoonmaker Mica Co 900 Jefferson Ave Newport News Va
Assembly Products Inc Chesterland 31 Ohio
Associated American Trading Div—see Associated American Winding Machines Inc
Associated American Winding Machines Inc 750 St Ann's Ave New York 56 NY
Associated Engineering Corp 65 Kent St Brookline 46 Mass
Associated Manufacturers & Distributors Corp 5015 S E Haig St Portland 6 Ore
Associated Research Inc 3789 W Belmont Ave Chicago 18 Ill
ASTRA-LITE—Metalcraft Products Co Inc
ATCOTRAN—Automatic Timing & Controls Inc
ATCOTROL—Automatic Timing & Controls Inc
ATCOTRONIC—Automatic Timing & Controls Inc
Athol Machine & Foundry Co 82 South St Athol Mass
Atkomatic Valve Co Inc 545 W Abbott St Indianapolis Ind
Atlantic Conduit Fittings Co 450 Western Ave Boston Mass
Atlantic Engravers Inc 52 Ocean Ave Amityville NY
Atlantic Transformer Co 8330 Hegerman St Philadelphia 36 Pa
Atlantic Transformer Corp—see Atlantic Transformer Div
Atlantic Transformer Div New London Instrument Co Inc 30 Hynes Ave Groton Conn
ATLAS—SKF Industries Inc
ATLAS—Tevco Insulated Wire
ATLAS-AIRE—Atlas Tool & Mfg Co
Atlas Asbestos Co 423 Walnut St North Wales Pa
Atlas Electric Products Co 319 Ten Eyck St Brooklyn 6 NY
Atlas Metal Industries 259 W 23 St Hialeah Fla
Atlas Mineral Products Co Mertztown Pa
Atlas Overhead Door Co Mill St at Reading Railroad Quakertown Pa
Atlas Sheet Metal Works—see Atlas Metal Industries
Atlas Tack Corp Pleasant & South Sts Fairhaven Mass
Atlas Tool and Mfg Co 5147 Natural Bridge Ave St Louis 15 Mo
Atlee Corp 47 Prospect St Woburn Mass
Atlight Lighting Equipment—see Atlas Electric Products Co
ATLITE—Atlas Electric Products Co
ATMO—Kidde Ultrasonic & Detection Alarms Div
AUBESTON—Auburn Mfg Co
Auburn Mfg Co Pease Ave Stack St Middletown Conn
AUDIOSPHERE—Simpson (Mark) Mfg Co Inc
AUDIOTONE—Peschel Electronics Inc
AURORA—Metalcraft Products Co Inc
Aurora Pump Co—Aurora Pump Div New York Air Brake Co
Aurora Pump Div New York Air Brake Co 54 Loucks St Aurora Ill
Austin (M B) Co—see Stonco Electric Products Co
AUT-O-DOR—Richards-Wilcox Mfg Co
AUTEX—Willard Storage Battery Div Electric Storage Battery Co
Auth Electric Co Inc 34-20 45th St LIC 1 NY
Auth Electrical Specialty Co Inc—see Auth Electric Co Inc
AUTHOTONE—Auth Electric Co Inc
Auto Arc-Weld Mfg Co 9615 Meech Ave Cleveland 5 Ohio
AUTO-BIN-DICATOR—Bin-Dicator Co
AUTO-BLOC—Round (David) & Son Inc
AUTO-BRIDGE—Industrial Instruments Inc
AUTO-PHONE—Couch (S H) Co Inc
Autocall Co 58 Warden Ave Shelby Ohio
AUTOCON—Automatic Control Co
AUTODYNE—Westinghouse Electric Corp
AUTOFLEX—Universal Metal Hose Co
AutoFYRstop Co 2035 Washington Ave Phila 46 Pa
AUTOGAP—Hubbard & Co
Automatic Control Co 995 University Ave St Paul 4 Minn
Automatic Devices—see Automatic Devices Div American Machine & Metals Inc
Automatic Devices Div American Machine & Metals Inc Sellersville Pa
Automatic Electric Co Northlake Ill
Automatic Electric Mfg Co—see Aemco Inc
Automatic & Precision Mfg Co—see APM Corp
Automatic Products Co—see Controls Co of America
Automatic Switch Co 50-56 Hanover Rd Florham Pk NJ
Automatic Temperature Control Co—see Automatic Timing & Controls Inc
Automatic Timing & Controls Inc King of Prussia Pa
Automatic Transportation Co 101 W 87th St Chicago 20 Ill
Automatic Vulcanizers Corp 16 Hudson St New York 13 NY
Automation Products Inc 3030 Max Roy St Houston 24 Tex
AUTOMATOR—Marathon Electric Mfg Corp
AUTOMATROL—Nelson Electric Mfg Co
AUTORESET—AutoFYRstop Co
AUTOSET—Stromberg Div General Time Corp
AUTOSPEED—Stromberg Div General Time Corp
AUTOSTATIC—Lake Shore Electric Corp
AUTOTAK—Howell Instruments Inc
AUTOTEMP—Howell Instruments Inc
Autotron Inc 3629 N Vermilion St Danville Ill
AVENARIUS CARBOLINEUM—Carbolineum Wood Preserving Co
AVIGATOR—Mitchell Industries Inc
Avion Div—see ACF Industries Inc ACF Electronics Div
AXIFLO—Westinghouse Electric Corp
AXIVANE—Joy Mfg Co

B

B-LINE—Black (M) Mfg Co
BAC—Ettco Wire & Cable Corp
BBB—Becker Bros Carbon Co
B & C Metal Stamping Co P O Box 2506 Atlanta Ga

BD—Beede Electrical Instrument Co Inc
BFC—Bernard-Franklin Co Inc
B & H Instruments Inc—see Howell Instruments Inc
B M—Briegel Method Tool Co
B & M Electric Corp 168 7th St Brooklyn 15 NY
B M & D—B M D & R Inc
B M D & R Inc 7020 Walker St St Louis Park Minneapolis 16 Minn
B-T LABS—Blonder-Tongue Laboratories Inc
BTC—Berkshire Transformer Corp
BTC—Brewer-Titchener Corp
BVI—Burgess Vibrocrafters Inc
B/W Controller Corp 2200 E Maple Rd Birmingham Mich
BABY-COM—Fanon Electronic Industries Inc
BABY COMBO—Mole-Richardson Co
BABY DIGGER—Cleveland Trencher Co
BABY VENT—Buffalo Forge Co
BADGER—Reliance Time Controls Inc
Badger Die Casting Corp 201 W Oklahoma Ave Milwaukee 7 Wis
Bahnson Co 1001 S Marshall St Winston-Salem NC
Bailey Meter Co 1050 Ivanhoe Rd Cleveland 10 Ohio
Baker-Barkon Co 1335 S W Morrison St Portland Ore
Baker Perkins Inc Saginaw Mich
Baker-Roos Inc 602 W McCarty St Indianapolis 6 Ind
BAKER SCAFFOLD—Baker-Roos Inc
BALANCE—Self-Lifting Piano Truck Co
BALCO—Driver (Wilbur B) Co
Baldor Electric Co 4353 Duncan Ave St Louis 10 Mo
BALL-RITE—Cummins Portable Tool Div John Oster Mfg Co
BALLOLITE—Line Material Industries
Ballymore Co Lincoln & Garfield Aves West Chester Pa
BAND-ROD—Sherman (HB) Mfg Co
BANNER-AIRE—Argo Products Co
BANTAM—American Rectifier Corp
BANTAM—Small Motors Inc
BANTAM-BIN-DICATOR—Bin-Dicator Co
Bar-Brook Mfg Co Inc 6133-35 Linwood Ave Shreveport La
Barber-Colman Co P O Drawer 99 Rockford Ill
Barber Electric Mfg Co Inc 30 Chestnut St N Attleboro Mass
Barber-Greene Co 400 N Highland Ave Aurora Ill
Borbour (J E) Co—see Ludlow Mfg & Sales Co
Barkelew Electric Mfg Co 1905 Columbia Ave Middletown Ohio
Barkon-Frink Tube Lighting Corp—see Frink Corp
Barksdale Valves 5125 Alcoa Ave Los Angeles 58 Calif
Barrett Varnish Co 1532 S 50th Ct Cicero 50 Ill
Barry Controls Inc—see Barry Wright Corp
Barry Wright Corp Barry Controls Eastern Div 700 Pleasant St Watertown 72 Mass
BARRYMOUNT—Barry Wright Corp
BARTRAP—Burndy Corp
Barth Corp 12650 Brookpark Rd Cleveland 30 Ohio
Barth Stamping & Machine Works—see Barth Corp
Bartlett Mfg Co 3003 E Grand Blvd Detroit 2 Mich
BASEDUCT—National Electric Div H K Porter Co
Bashlin (W M) Co Bashlin Bldg Grove City Pa
BASIC UNIT—Electro Lighting Corp
BATCHOMATIC—Barber-Greene Co
BATTERY KEEPER—Rex Metal Craft Inc
BATTERY SCOPE—Christie Electric Corp
BAUER—Mission Appliance Corp
Bauer Electric—see Mission Appliance Corp
Bay-Tronic Co 43 Evergreen St Bayonne NJ
BEACON RAY—Federal Sign & Signal Corp
BEADS-IN-SLEEVES—Saxonburg Ceramics Inc
BEAM-HUGGER—Round (David) & Son Inc
BEAM JECTOR—Electro Lighting Corp
BEAM-O-MATIC—U-C Lite Mfg Co
BEAMSPOT—Amplex Corp
BEAUTY TONE—Westinghouse Electric Corp Lamp Div
Beaver-Advance Corp 12th & Factory Sts Ellwood City Pa
Beaver Art Metal Corp—see Beaver-Advance Corp
Beaver Pipe Tools Inc 310 Dana Ave N E Warren Ohio
Becker Bros Carbon Co 3450 S Laramie Ave Cicero 50 Ill
Becker Bros Electrical Corp—see Ther Electric & Machine Works
Beckley Electric Co Inc 468-470 Grand Ave Brooklyn 38 NY
BECO—Westinghouse Electric Corp
Beede Electrical Instrument Co Inc Penacook NH
BELCAP—Sprague Electric Co
BELCO—Bogue Electric Mfg Co
BELCON—Bogue Electric Mfg Co
BELBOND—Belden Mfg Co
Belden Mfg Co P O Box 5070A Chicago 80 Ill
BELDENAMEL—Belden Mfg Co
BELDFOIL—Belden Mfg Co
BELDONLITE—Stamford Metal Specialty Co Inc
BELDSOL—Belden Mfg Co
BELDTHERM—Belden Mfg Co
Bell Electric Co 5735 S Claremont Ave Chicago 36 Ill
BELL LAMP—Mole-Richardson Co
Bell Lumber & Pole Co 524 Midland Bank Bldg Minneapolis 1 Minn
Bell Pole Co Ltd—see Bell Lumber & Pole Co
Bell Sound Systems Inc 555 Marion Rd Columbus 7 Ohio
Bellevue Industrial Furnace Co 2620 Crane Ave Detroit 14 Mich
BELLOFRAM—General Control Co
BELT-AIR—Buffalo Forge Co
BELTA—Diamond Expansion Bolt Co Inc
Benbow Mfg Co—see Insul-8-Corp
BENFIELD—Steelduct Co
Benjamin Div Thomas Industries Inc 207 E Broadway Louisville 2 Ky
Benjamin Reel Products Inc 10700 Broadway Cleveland 25 Ohio
Benson (Alexander R) Co Inc 2 Davis Rd New Hartford NY
BERALOY—Driver (Wilbur B) Co
Bergen Laboratories Inc 60 Spruce St Paterson 1 NJ
Berko Electric Mfg Corp 182-20 Liberty Ave Jamaica 12 NY
Berkshire Laboratories 942 Bank Village Greenville NH
Berkshire Transformer Corp Kent Conn
BERMICO—Brown Co
Bernard-Franklin Co Inc Frankford & Torresdale Aves Philadelphia 24 Pa
Bernina Sewing Machine Co 29 W 35 St NY 1 NY
Berns Air King Corp 3050 N Rockwell St Chicago Ill
Bernz (Otto) Co Inc 740 Driving Park Ave Rochester 13 NY
BERNZ-O-MATIC—Bernz (Otto) Co Inc
BERNZRITE—Bernz (Otto) Co Inc
Berry (William B) Co 117 Causeway St Boston 14 Mass
Bertram (Harvey P) Co 2225 Bogen St Cincinnati Ohio
BESTO-WIRE—Rhode Island Insulated Wire Co Inc
BETA—Wakefield Lighting Div
Beverly Shear Mfg Co 3023 W 111 St Chicago 43 Ill
BI-CAST—Bishop Mfg Corp
BI-FLO—Aerovent Fan Co Inc
BI-PRENE—Bishop Mfg Corp
BI-SEAL—Bishop Mfg Corp
Biddle (James G) Co 1316 Arch St Phila 7 Pa
Biddle Trade Publishing Co 2720 Beverly Blvd Los Angeles 57 Calif
BIFURCATOR—DeBothezat Fans Div American Machine & Metals Co
BIG BEAM—U-C-Lite Mfg Co
BIG CHAMP—Champion DeArment Tool Co
BILGER—Self-Lifting Piano Truck Co
Billings & Spencer Co 1 Laurel St Hartford 1 Conn
Bin-Dicator Co 13946-212 Kercheval Ave Detroit 15 Mich
BIN-EYE—Jeffrey Mfg Co
BIN-FLO—Bin-Dicator Co
BIN-VUE—Controls Co of America
BIN-VUE—Convair Inc
Bios Laboratories Inc 17 W 60 St New York 23 NY
Birdsell Mfg Co Inc—see Birdsell Products
Birdsell Products 350 N Halstead Pasadena Calif
Bishop Mfg Corp 10 Canfield Rd Cedar Grove NJ
BLACK BEAUTY—Texas Creosoting Co
Black (M) Mfg Co 300-08 N Third St Phila 6 Pa
Black & Decker Mfg Co Towson 4 Md
BLACK LINE—Black (M) Mfg Co
Blackburn (Jasper) Corp 1525 Woodson Rd St Louis 14 Mo
Blackburn Specialty Co—see Blaco Mfg Co
Blackhawk Industrial Div Blackhawk Mfg Co 13320 W Reichert Pl Butler Wis
Blackhawk Industries 250 S Main St Dubuque Iowa
Blaco Mfg Co 6541 Euclid Ave Cleveland 3 Ohio
BLAK-RAY—Ultra-Violet Products Inc
BLAKE—Couch (S H) Co Inc
Bliss Electronic Corp Sussex NJ
Blitz Electric Co 5713 Wentworth Ave Chicago 21 Ill
BLO-FAN—Emerson-Pryne Co
Blonder-Tongue Laboratories Inc 9 Alling St Newark 2 NJ
Blower (L R) Co—see Ripley Co Inc
BLU-RED—Associated American Winding Machines Inc
BLUE BONNET—Forston Co
BLUE DIAMOND—Pioneer Gen-E-Motor Co
BLUE DIAMOND—Whitman & Barnes Div United Drill & Tool Corp
Blue M Electric Co 138th & Chatham Sts Blue Island Ill
BLUE-POINT—Snap-on-Tools Corp
BLUE TOP—Westinghouse Electric Corp Lamp Div
Bodendieck Tool Co P O Box 499 Taylorville Ill
Bodine Electric Co 2500 W Bradley Pl Chicago 18 Ill
Bogen (David) Co Inc—see Bogen-Presto Co
Bogen-Presto Co Route 4 & Forest Ave (P O Box 500) Paramus NJ
Bogue Electric Mfg Co 52 Iowa Ave Paterson 3 NJ
BON-E-CON—Bonney Forge & Tool Works
BONDEZE—Phelps Dodge Copper Products Corp
Bonnell (Wm A) Co—see Bonnell Electric Mfg Co Inc
Bonnell Electric Mfg Co Inc 192-194 Chambers St NY 7 NY
Bonnell Electrical Specialties—see Bonnell Electric Mfg Co Inc
Bonney Forge & Tool Works 2400 Rockhill Rd (North) Alliance Ohio
Borden Co—see Beaver Pipe Tools Inc
Borden Engineering Co—see Borden Engineering Div
M J Johnson Aircraft Engineering Co
Borden Engineering Div M J Johnson Aircraft Engineering Co Box 10 Morristown NJ
BORNISIL—Westinghouse Electric Corp
Borthig (George C) Co Inc P O Box 115 East Rutherford NJ
BOSS—Huenefeld Co
Boston Gear Works 14 Hayward St Quincy 71 Mass
Boston Woven Hose & Rubber Co—see American Biltrite Rubber Co Boston Woven Hose & Rubber Div
Bound Brook Bearing Corp of America Bound Brook NJ
Bound Brook Oil-Less Bearing Co—see Bound Brook Bearing Corp of America
Bowers Battery & Spark Plug Co—see General Battery and Ceramic Corp
Bowers Mfg Co Inc 6700 Avalon Blvd Los Angeles 3 Calif
BOX-LOK—Metalectrics Inc
Brach Mfg Corp 200 Central Ave Newark 3 NJ
Bradley Laboratories Inc—see Bradley Semiconductor Corp
Bradley Semiconductor Corp 275 Welton St New Haven 11 Conn
Brady (W H) Co 727 W Glendale Ave Milwaukee 9 Wis
Brady Milwaukee Co—Brady (WH) Co
Brand (William)-Rex Div American Enka Corp 31 Sudbury Rd Concord Mass
Brand Dielectrics 902 Main St Willimantic Conn
Branham Mareck & Duepner Inc—see B M D & R Inc
BRASCOLITE—Guth (Edwin F) Co
BRAZALOY—All-State Welding Alloys Co Inc
BRAZECLAD—American Silver Co Inc
BREAKER-FUSE—General Electric Co Apparatus Sales
BREEZE-AIR—Buffalo Forge Co
BREEZE BUILDERS—Bar-Brook Mfg Co Inc
BREEZO—Buffalo Forge Co
Breuer Electric Mfg Co 5100 N Ravenswood Ave Chicago 40 Ill
Brewer-Titchener Corp 111 Port Watson St Cortland NY
Bridgeport Fittings Inc 209 Center St Bridgeport 2 Conn
Bridgeport Hardware Mfg Corp Scofield Ave Bridgeport 5 Conn
Bridgeport Switch Co—see Bridgeport Fittings Inc
Briegel Method Tool Co 104 N E First St Galva Ill
Bright Star Battery Co—see Bright Star Industries
Bright Star Industries 600 Getty Ave Clifton NJ
Bristol Motor Div Vocaline Co of America Inc Coulter St Old Saybrook Conn
BRITE BEAM—Lightalarms Inc
BROADSTREETER—Metalcraft Products Co Inc
Broan Mfg Co Inc Hartford Wis
BRONCO—Western Insulated Wire Co
Bronze Bearings Inc 340 N Ave East Cranford NJ
Brook Motor Corp 3302-4 W Peterson Ave Chicago 45 Ill
BROOKS—Mine Safety Appliances Co
Brooks Lumber Co P O Box 153 Bellingham Wash
Brown Company 150 Causeway St Boston 14 Mass
BROWN DEVIL—Ohmite Mfg Co
Brown Instrument Co—see Minneapolis-Honeywell Regulator Co Industrial Div
Brown Instrument Div—see Minneapolis-Honeywell Regulator Co Industrial Div
Brown Products Corp 1090 Springfield Rd Union NJ
Brown Wood Preserving Co 409 Commonwealth Bldg Louisville 2 Ky
BROWN-X—Pass & Seymour Inc
BROWNING—Potter & Rayfield Inc
Bruhn Steel Products Co 300 E Dunes Highway Chesterton Ind
Brundee Co 48 Hale St Cranford NJ
Brunswick Instruments P O Box 813 New Brunswick NJ
BRUNT—Parr Mfg Corp
Brunt Faultfinder Mfg Co—see Brundee Co
Bryant Electric Co 1421 State St (Box D Barnum Sta) Bridgeport 2 Conn
Bryant Mfg Co 410 N Paulina St Chicago 22 Ill
BUBBLTROL—Automatic Control Co
Buchanan Electrical Products Corp 434 US Route 22 Hillside NJ
BUCKEYE—Gar Wood Industries Inc
BUCKEYE—Youngstown Sheet & Tube Co
Buckles (Chris) Inc 4830 S Hoyne Ave Chicago 9 Ill
BUDGET-LITES—Litecraft Mfg Co
BUDGETLITE—Ainsworth Lighting Inc
BUDGIT—Shaw-Box Crane & Hoist Div
Buffalo Forge Co 490 Broadway Buffalo 5 NY
Buffalo Machine Mfg Co 586 Tonawanda St Buffalo 7 NY
BUG-A-WAY—Westinghouse Electric Corp Lamp Div
BUG CHASER—Amplex Corp
Buggie (HH)—see Burndy Corp
BUILDERS—Stanley Power Tools Div
Building Service Co 4923 18th Ave S Minneapolis 17 Minn
BUILT-IN-WATCHMEN—Westinghouse Electric Corp
BULL DOG—American Biltrite Rubber Co Boston Woven Hose & Rubber Div
BULL DOG—Marvel Lamp Co
Bulldog Div Gregory Industries Inc Toledo Ave & East 28 St Lorain Ohio
Bulldog Electric of Denver—see Young Electric & Mfg Co Inc
BullDog Electric Products Co—see I-T-E Circuit Breaker Co BullDog Electric Products Div
BULLS-I-UNIT—Kirkland (H R) Co
Bunnell (G F) Co—see Atlantic Engravers Inc
Bunting Brass and Bronze Co 715 Spencer St Toledo 1 Ohio
Burbank Electrical Products 215 W Palm Ave P O Box 7 Burbank Calif
BURCAP—Burndy Corp
Burgess Battery Co Handi Craft Div—see Burgess Vibrocrafters Inc
Burgess Battery Co Freeport Ill
Burgess Vibrocrafters Inc Grayslake Ill
Burling Instrument Co Inc 16 River Rd Chatham NJ
Burndy Corp Norwalk Conn
Burndy Engineering Co—see Burndy Corp
Burnley Battery & Mfg Corp 103 Clay St (P O Box 511) North East Pa
Burns (James F) Co 1601 Industrial Highway Pennsauken NJ

Burr Aluminum Products Div—see Keyes-Davis Co
Burt Mfg Co 936 S High St Akron 11 Ohio
Burton Mfg Co 2520 Colorado Ave Santa Monica Calif
Busada Mfg Corp 32-21 Downing St Flushing 54 NY
Bush Transformer Corp 707 North St Endicott NY
BUSS—Bussmann Mfg Div McGraw-Edison Co
Bussmann Mfg Div McGraw-Edison Co University at Jefferson St Louis 7 Mo
BUSTER—Lidseen of North Carolina Inc
BUSTRIBUTION—I-T-E Circuit Breaker Co BullDog Electric Products Div
BUTTIN—Burndy Corp
BUZABEL—Edwards Co Inc
BUZACALL—Edwards Co Inc
Byers Co Clark Bldg Pittsburgh 30 Pa
BYTAP—Burndy Corp

C

C & B Engineering and Fabricating Corp P O Box 8701 Houston Tex
CBC Electronics Co Inc 2601 N Howard St Philadelphia 33 Pa
CCA—Coil Co of America Inc
C & D Batteries Div Electric Autolite Co Washington & Cherry Sts Conshohocken Pa
CDM—Curtis Development & Mfg Co
C&E—Ericson Mfg Co
CFI—Day-Brite Lighting Inc
C-H—Cutler-Hammer Inc
C-I BOARD—Century Lighting Inc
C-J-R—Metropolitan Electric Mfg Corp
C-LECTOR—Century Lighting Inc
C-L-X—Simplex Wire & Cable Co
C M—Chicago Miniature Lamp Works
CM—Chisholm-Moore Hoist Div Columbus McKinnon Corp
C N M—Conduit Nipple Mfg Co
COM—Wing (L J) Mfg Co
C-Q-T—Chase-Shawmut Co
C T R—Cincinnati Time Recorder Co
C & W Sales Co—see Clark (George P) Div Cragin & Wilkins Co Inc
CWC Corp—see Crozier Machine Tool Co
CABINETROL—General Electric Co
CABLE-AIRE—Round (David) & Son Inc
CABLE BASKET—Chalfant Products Co Inc
Cable Electric Products Inc 234 Daboll St Providence 7 RI
CABLE TRACER—Amprobe Instrument Corp
CABLE TRUSS—Chalfant Products Co Inc
CABLEMATIC—Will-Son Mfg Co
CABLERACK—Chalfant Products Co Inc
CABLERAY—Sair Corp
CABLETRAY—Chalfant Products Co Inc
CABLETROF—P-W Industries Inc
CABLETROUGH—Chalfant Products Co Inc
CABLEX—Collyer Insulated Wire Co
CADDY—Erico Products Inc
CADET—Guth (Edwin F) Co
CADET—Linemaster Switch Corp
CADILLAC—Clements Mfg Co
CADILLAC—Waveland Electric Co
CADWELD—Erico Products Inc
CALCULITE—Lightolier Inc
Califone Corp—see Rheem Califone Corp
CALK-INS—Rawlplug Co Inc
Calpa Products Co 5420 Paschall Ave Phila 43 Pa
CALROD—General Electric Co Apparatus Sales
CALSUN BRONZE—Anaconda Wire & Cable Co
CALTROL—Caltron Products Co
Caltron Co—See Caltron Products Co
Caltron Products Co 3518 W Pico Blvd Los Angeles 19 Calif
Calumet Plastics Inc 11201 S Cottage Grove Ave Chicago 28 Ill
Calvert Co 19851 Ingersoll Dr Rocky River 16 Ohio
Cam-Lok Div Empire Products Inc 9213 Blue Ash Rd Cincinnati 42 Ohio
CAM-VAR—Electro-Technical Products Div
Camblock Corp 825 Bronx River Ave New York 72 NY
CAMBRICOID—American Electric Cable Co
CAMEO—Rodale Mfg Co Inc
Can Arm Corp P O Box 156 Champlain NY
CANDELITE—Duro-Test Corp
CANDLEFLAME—North American Electric Lamp Co
CANDYLBEME—North American Electric Lamp Co
Canning-Pekara Inc 2144 N Wood St Chicago 14 Ill
Cannon Electric Co 3208 Humboldt St Los Angeles 31 Calif
Cannon Electric Development Co—see Cannon Electric Co
CANSEAL—Cannon Electric Co
CAPAC—Engelhard Industries Inc
CAPACOHMETER—Simpson Electric Co
CAPCO—Capitol Stage Lighting Co Inc
CAPCOLITE—Capital Stage Lighting Co Inc
Capewell Mfg Co 60-70 Governor St Hartford 2 Conn
CAPILLARY—Air & Refrigeration Corp
Capitol Hardware Mfg Co Inc 400 N Leavitt St Chicago Ill
Capitol Stage Lighting Co Inc 527 W 45 St New York 36 NY
CAPRI—Frigid Inc
CAPRI—Swivelier Co Inc
Capson Mfg Co 2565 W Fullerton Ave Chicago 47 Ill
CAPTI-VOLT—Vickers Inc
CARBI-TWIST—U S Expansion Bolt Co
Carboline Co 32 Hanley Industrial Ct St Louis 17 Mo
Carbolineum Wood Preserving Co 6683 N 40 St Milwaukee 9 Wis
CARBOLON—Carbone Corp
CARBOLUBE—Carbone Corp
CARBOMITE—Continental-Wirt Electronics Corp
Carbon Engineering Corp P O Box 256 Slinger Wis
Carbone Corp 400 Myrtle Ave Boonton NJ
CARENCO—Carbon Engineering Corp
CARGOLITE—Steber Div Pyle-National Co
Carlon Products Corp P O Box 133 Aurora Ohio
Carney (B J) & Co 326 Peyton Bldg Spokane 8 Wash
Carol Cable Co 190 Middle St Pawtucket RI
CAROPRENE—Carol Cable Co
Carpenter Mfg Co 2250 Gilman Square Somerville 45 Mass
Carrier Corp Carrier Parkway Syracuse 1 NY
Carter Motor Co 2711 W George St Chicago 18 Ill
CARTON—Self-Lifting Piano Truck Co
CARTRIJ-DRY—Pyramid Electric Co
Case (J I) Co Racine Wis
Castle Engineering Co P O Box 35 Seneca Castle NY
Castle Hills Corp—see Hartzell Propeller Fan Co
CASTOMATIC—Federated Metals Div American Smelting & Refining Co
CATALINA—Benjamin Division (Thomas Industries Inc)
CATALINA—Industrial Lamp Corp
CATALINA—Swivelier Co Inc
CATARACT—Ajax Electric Co
Caterpillar Tractor Co Industrial Engine Plant Peoria Ill
Cathodic Protection Service 4601 Stanford St Houston Tex
Cathonics Inc—see Cold Cathode Lighting Corp
CAVALIER—Wakefield Lighting Div
Cavalier Air Conditioning Co—see Forston Co
Cavalier Corp Electric Heating Div 343 W First St. Chattanooga Tenn
Ceco Steel Products Corp 5601 W 26 St Chicago 50 Ill
CEETEE—Crescent Tool Co
CEFCO—Commercial Enclosed Fuse Co of NJ
CEILCELL—United Lighting & Ceiling Co
CEILGLO—United Lighting & Ceiling Co
CEILGRID—United Lighting & Ceiling Co
Ceilheat Div Homes Inc—see Ceilheat Inc
Ceilheat Inc 5212 Homberg Drive (P O Box 10066) Knoxville Tenn
Ceiling Materials Co—see L & P Lighting
Ceiling Materials Co 200 Waring Rd Memphis 17 Tenn
CEILITE—United Lighting & Ceiling Co
CEILO—Gibson Mfg Co
CEILUME—United Lighting & Ceiling Co
CELENAMEL—Belden Mfg Co
Cellomatic Battery Corp Archbald Pa
CELORON—Continental-Diamond Fibre
CEMCO—Connecticut Electric Mfg Co
CENCO—Central Scientific Co
CENTAWATT—Wesix Electric Heater Co
Central Neon Co—Centralite Co Inc
Central Porcelain Co 507 Railroad St Columbiana Ohio
Central Scientific Co 1700 Irving Pk Rd Chicago 13 Ill
Central Station Signals Inc 53 W 23 St New York 10 NY
Central Transformer Co 900 W Jackson Blvd Chicago 7 Ill
Central Transformer Corp P O Box 687 Pine Bluff Ark
Centralite Co Inc Dayton & Central Aves Cincinnati 14 Ohio
CENTRI-CORE—Alpha Metals Inc
CENTRILINE—Westinghouse Electric Corp Sturtevant Div
CENTRL-VENT—Lau Blower Co
CENTROL—Nelson Electric Mfg Co
CENTRON—Sunbeam Lighting Co
Century Electric Co 18th & Pine Sts St Louis 3 Mo
Century Fan & Ventilator Co 45 Cedar St Stamford Conn
Century Lighting Inc 521 W 43 St New York 36 NY
CERAMAGNET—Stackpole Carbon Co
Ceramic Specialties Co—see Lint (Clyde W)
CERTAIN CURTAIN—Hayes (C I) Inc
Certified Ballasts Mfrs—see Fleur-O-Lier Mfrs
Certified Fleur-O-Lier Mfrs—see Fleur-O-Lier Mfrs
Chadsey Corp P O Box 1858 Hartford 1 Conn
Chadsey Mfg Co Inc—see Chadsey Corp
Chain Belt Co 4701 W Greenfield Ave Milwaukee 1 Wis
CHAIN MATE—Radix Wire Co
CHAIN-O-LITE—House-O-Lite Corp
Chalfant Products Co Inc 11525 Madison Ave Cleveland 2 Ohio
CHALKBOARD—Solar Light Mfg Co
CHALLENGER—Bogen-Presto Co
CHALLENGER—Coffing Hoist Div Duff-Norton Co
Chamor Mfg Corp 43-63 11th St Long Island City 1 NY
CHAMPION—Turner Brass Works
CHAMPION—Winpower Mfg Co
CHAMPION—York Div Borg-Warner Corp
Champion DeArment Tool Co South Main St Meadville Pa
Champion Lamp Works 330 Lynnway Lynn Mass
Champion Mfg Co—see Winpower Mfg Co
Chance (A B) Co 210 N Allen St Centralia Mo
Chandeysson Electric Co 4084 Bingham Ave St Louis 16 Mo
CHANGE-A-CYCLE—Carter Motor Co
CHANGE-A-VOLT—Carter Motor Co
CHANGE-OUT—Joy Mfg Co
CHANNEL-DUCT—Glastic Corp
CHANNELITE—Swivelier Co Inc
CHANNELLLOCK—Champion DeArment Tool Co
Chapin (Chas E) Co Inc 227 Fulton St NY 7 NY
Chapman (PE) Electrical Works Inc 1820 Chouteau Ave St Louis 3 Mo
CHARCO—Charleston Rubber Co
CHARG-O-MATIC—Hertner Electric Co
CHARGAMATIC—Electric Cord Co
CHARGE-A-PACK—Electric Service Systems Inc
CHARGE CONTROL—Exide Industrial Div
CHARGICATOR—Hickok Electrical Instrument Co
Charles Machine Works Inc P O Box 66 Perry Okla
Charleston Rubber Co Stark Industrial Park Charleston SC
CHASBESTOS—Chase & Sons Inc
CHASE—Thomas & Betts Co
Chase Brass & Copper Co Inc 236 Grand St Waterbury 20 Conn
CHASEFIL—Chase & Sons Inc
CHASE-KOTE—Chase & Sons Inc
CHASE-MOLD—Chase & Sons Inc
CHASE PRIME—Chase & Sons Inc
Chase-Shawmut Co 374 Merrimac St Newburyport Mass
Chase & Sons Inc 26 Spruce St North Quincy Mass
CHASE WRAP—Chase & Sons Inc
CHEERLIGHT—Aerolux Lights Corp
Chelsea Fan and Blower Co 639 South Ave Plainfield NJ
CHEM-MARINE—Hubbell (Harvey) Inc
Chemalloy Electronics Corp Gillespie Field Santee Calif
Cherry Electrical Products Corp 1650 Deerfield Rd Highland Park Ill
Chesflex Corp 684 Nepperhan Ave Yonkers NY
Chester Cable Corp Oakland Ave Chester NY
Chester Hoist Div National Screw & Mfg Co Lisbon Ohio
Chester Mfg Co—see Chester Hoist Div National Screw & Mfg Co
CHICAGO—Klein (Mathias) & Sons
CHICAGO—Lidseen of North Carolina Inc
Chicago Blower Corp 9867 Pacific Ave Franklin Park Ill
Chicago Commutator Inc Wheeling Rd & Exchange Ct Wheeling Ill
Chicago Decalcomania Co 3310 Elston Ave Chicago 18 Ill
Chicago Die Casting Mfg Co 2510-14 W Monroe St Chicago 12 Ill
Chicago Expansion Bolt Co 1338 W Concord Pl Chicago 22 Ill
Chicago Metal Hose Corp—see Flexonics Corp
Chicago Miniature Lamp Works 1500 N Ogden Ave Chicago 10 Ill
Chicago Pneumatic Tool Co 6 E 44 St NY 17 NY
Chicago Roller Skate Co—see Ware Fuse Corp
CHICAGO-SIGNAL—Couch (SH) Co Inc
Chicago Tubing & Braiding Co—see Flexonics Corp
Chicago Wire Iron & Brass Works 2411 W Belmont Ave Chicago 18 Ill
CHIEF—Collins Machinery Corp
CHILCO—Chicago Miniature Lamp Works
CHILL AIR—National Engineering & Mfg Co
CHINALAK—Dolph (John C) Co
Chisholm-Moore Hoist Corp—see Chishold-Moore Hoist Div Columbus McKinnon Corp
Chisholm-Moore Hoist Div Columbus McKinnon Corp 6072 Fremont Ave Tonawanda NY
CHLOREXTOL—Allis-Chalmers Mfg Co
CHLOROLUX—Luxor Lighting Products Inc
CHORDETTE—Edwards Co Inc
Christie Electric Corp 3410 West 67 St Los Angeles 43 Calif
CHROMALOX—Wiegand (Edwin L) Co
CHROME-X—Pass & Seymour Inc
CHRONISTER—Bergen Laboratories
CHRONO-SPRAY—Paragon Electric Co
CHRONO-TEMP—Paragon Electric Co
Chronoflash Co Oakdale Pa
CHRYSLER AIRTEMP—Airtemp Div Chrysler Corp
CINCH—National Lead Co
Cincinnati Clock & Instrument Co 1117 Harrison Ave Cincinnati 14 Ohio
Cincinnati Time Recorder Co 1733 Central Ave Cincinnati 14 Ohio
CINELITE—Mole-Richardson Co
Circ-Lite Inc—see Hasco Electric Corp
CIRCA-LITE—Sterner Industries
CIRCAB—Circle Wire & Cable Corp
Circle A-W Products Co—see Alwalt Mfg Co
Circle Air Industries Inc 244 Herkimer St Brooklyn 16 NY
Circle Air Products Inc—see Circle Air Industries Inc
CIRCLE B—Bristol Motor Div Vocaline Co of America Inc
CIRCLE D—Natale Machine & Tool Co
Circle F Mfg Co 720 Monmouth St Trenton 4 NJ
CIRCLE L—Lew Electric Fittings Co
Circle Wire and Cable Corp 5500 Maspeth Ave Maspeth LI NY
Circlelite Corp—see House-O-Lite Corp
CIRCLELUX—Pfaff & Kendall
CIRCLEMOLD—Circle Wire & Cable Corp
CIRCLESHEATH—Circle Wire & Cable Corp
CIRCLETROL—Electrical Mfg Co
CIRCLGRID—Wilson (JA) Lighting & Display Inc
CIRCLINE—Sun-Lite Mfg Co
CIRCLOC—Circle Wire & Cable Corp
CIRCLOK—Circle F Mfg Co
CIRCUIT-SWITCHER—S & C Electric Co
CIRCUITROL—Continental Electric Equipment Co
CIRCULAIR—Kisco Co Inc
Circulators Devices Mfg Corp—see Frigid Inc
CIRCULITE—Lightolier Inc

CIRFLEX—Circle Wire & Cable Corp
CIRKLAIR—Foisom Co Inc
CIRTEX—Circle Wire & Cable Corp
CIRTUBE—Circle Wire & Caole Corp
CIRTUF—Circle Wire & Cable Corp
Clarage Fan Co Kalamazoo Mich
Clare (C P) & Co 3101 Pratt Blvd Chicago 45 Illinois
CLAREMONT—Lightolier Inc
Clark (George P) Div Cragin & Wilkins Co Inc Fitchburg Mass
Clark Controller Co 1146 E 152 St Cleveland 10 Ohio
CLASSIC—Carter Motor Co
CLAUDE BANKS—Kirlin Co
CLEAN-FLO—Allis (Louis) Co
CLEAN-O-MATIC—Siebring Mfg Co
Clean Sweep Co 6534½ Whittier Blvd Los Angeles 22 Calif
CLEAR-SELE—Rust-Oleum Corp.
CLEARSITE—Economy Fuse Div
Clement Electric Co 223 Erie St N W Grand Rapids 2 Mich
Clement Industrial Electric Co—see Clement Electric Co
Clements Mfg Co 6650 S Narragansett Ave Chicago 38 Ill
Cleveland Electric Motor Co 5213 Chester Ave Cleveland 3 Ohio
Cleveland Switchboard Co 2925 E 79 St Cleveland 4 Ohio
Cleveland Trencher Co 20100 St Clair Ave Cleveland 17 Ohio
CLI-MO-TROL—Weltronic Co
CLICK DIAL—Penn Controls Inc
CLICK-ON—Electrical Fittings Corp
Clifton Conduit Co 3300 Eastbourne Ave Baltimore 24 Md
Clifton Mfg Co Inc 34 Topalian St Mattapan Boston 26 Mass
CLIMATE CHANGER—Trane Co
CLIMATROL—Mueller Climatrol
CLIMAX—Glade Mfg Co
CLINI-GRAPH—Weksler Instruments Corp
CLIPPER—General Controls Co
CLIPPER—Linemaster Switch Corp
CLIPPER—Walker Brothers
Clipper Mfg Co 2800 Warwick Kansas City 8 Mo
CLORINOL—Sprague Electric Co
CLOSED-BACK—U S Expansion Bolt Co
CLUSTER-LITE—Revere Electric Mfg Co
Coates Electric Mfg Co 3419-11th Ave S W Seattle 4 Wash
BOBANIC—Driver (Wilbur B) Co
BOBENIUM—Driver (Wilbur B) Co
COCO—Coil Co of America Inc
CODE-CALL—Wheelock Signals Inc
Code Corp 222 Kalos St Philadelphia 28 Pa
Code Development Co—see Code Corp
Code Equipment Sales Co—see Code Corp
Code Products Corp—see Code Corp
COFFEE-HOT—Supreme Electric Products Co
Coffing Hoist Co—see Coffing Hoist Div Duff-Norton Co
Coffing Hoist Div Duff-Norton Co Danville Ill
COHRFOAM—Connecticut Hard Rubber Co
COHRLASTIC—Connecticut Hard Rubber Co
Coil Co of America Inc 207-209 Washington St Northvale NJ
COIL-FLEX—Ideal Industries Inc
Cold Cathode Corp—see Cold Cathode Lighting Corp
Cold Cathode Lighting Corp 76 S Bayles Ave Port Washington NY
COLDCOTE—Anaconda Wire & Cable Co
Cole (C W) & Co Inc P O Box 3382 Los Angeles 54 Calif
Cole Electric Products Co—see Federal Pacific
Collins Machinery Corp 955 Monterey Pass Rd Monterey Park Calif
Collyer Insulated Wire Co 249 Roosevelt Ave Pawtucket RI
Colonial Electric Products Div Colonial Neon Co Inc 1-115 Market St East Paterson NJ
COLOR-KEYED—Thomas & Betts Co
COLORBEAM—Amplex Corp
COLORSCOPE—Simpson Electric Co
COLORTONE—Jay Lighting Mfg Co Inc
COLORTONE—Westinghouse Electric Corp Lamp Div
COLOVOLT—Pollak Luminescent Corp
Columbia Cable & Electric Corp 255 Chestnut St Brooklyn 8 NY
Columbia Electric Mfg Co 4519 Hamilton Ave Cleveland 14 Ohio
Columbia Electric & Mfg Co North 2310 Fancher Way Spokane Wash
COLUMBIA-FLEX—Columbia Cable & Electric Corp
Columbia Industries Inc—see Columbia Products Inc
Columbia Metal Box Co 260 E 143 St NY 51 NY
Columbia Products Inc Wrightsville Pa
COLUMBIA-QUALITY—Columbia Metal Box Co
Columbia Wire & Supply Co 2850 Irving Park Rd Chicago 18 Ill
COLUMBUS—Conduit Pipe Products Co
Columbus Products Corp—Greibach Instruments Corp
Com-Pak-Ett Mfg Corp 650 Grand St Allegan Mich
Comar Electric Co 3349 W Addison Chicago 18 Ill
COMBI—Wodack Electric Tool Corp
COMET—Kent Co Inc
COMET—Standard Electric Co Inc
Comet Lamp Co 5 E 35 St New York 16 NY
COMFO—Mine Safety Appliance Co
COMFORT CONTROL—Controls Co of America
COMFORT-SHIELD—Lincoln Electric Co
COMMANDER—Sensitive Research Instrument Corp
Commercial Enclosed Fuse Co of NJ 6812 Polk St Guttenberg NJ
Commercial Reflector & Mfg Co 3109 Maple Ave Los Angeles 11 Calif
COMMERCIALAIRE—Frigid Inc
COMMODORE—Wakefield Lighting Div
Commercialaire Corp of America 840 E 98 St Brooklyn 36 NY
COMMERCIALITE—Commercial Reflector & Mfg Co
COMMUNICAL—Faraday Inc
COMMUNICATOR—Godrey Mfg Co
COMPACK—General Cable Corp
COMPACT—Linemaster Switch Corp
COMPACT TROFFER—Metalcraft Products Co Inc
Compco Corp 1800 N Spaulding Ave Chicago 47 Ill
COMPO—Bound Brook Bearing Corp of America
COMPOUND LEVER—Bartlett Mfg Co
COMPRESTO—Olin Conductors
COMPRESTOWELD—Olin Conductors
CON-FER-PHONE—Simpson (Mark) Mfg Co Inc
Conant Laboratories Box 3997 Bethany Station Lincoln 5 Neb
CONCENTROL—Continental Electric Equipment Co
Concrete Engineering Co—see Ceco Steel Products Corp
CONDEX—Simplex Wire & Cable Co
CondiLite Corp 889 Broadway New York 3 NY
CONDIT—Allis-Chalmers Mfg Co
CONDOR—Raybestos-Manhattan Inc
CONDU-MATIC—Chamor Mfg Corp
CONDUCTO-LUBE—Cool-Amp Co
Conduflor Corp 13560 Lorain Ave (P O Box 2748) Cleveland 11 Ohio
CONDUIT OF COLUMBUS—Conduit Pipe Products Co
Conduit Fittings Corp 6400 W 66th St Chicago 38 Ill
Conduit Nipple Mfg Co 1455 Spring Garden Ave Pittsburgh 12 Pa
Conduit Pipe Products Co 157 W Fulton St Columbus 16 Ohio
CONDULET—Crouse-Hinds Co
CONEX—Weiss & Biheller Merchandise Corp
CONFERENCE-TALK—Simpson (Mark) Mfg Co Inc
CONIC—Hilti Inc
Connecticut Electric Mfg Co Main St Bantam Connecticut
Connecticut Hard Rubber Co 407 East St New Haven 9 Conn
CONQUEROR—York Div Borg-Warner Corp
CONROD THE CONTROL—Dixie Controller Inc
CONS-O-LARM—Kidde Ultrasonic & Detection Alarms Div Walter Kidde & Co Inc
CONSOLAIRE—Remington Corp
Consolidated Pipe Co of America 1066 Home Ave Akron Ohio
CONSTANT-FLOW—Blue M Electric Co
CONSTELLATION—Trindl Products Ltd
CONTINENTAL—Crane (H W) Co
CONTINENTAL—Globe Lighting Products Inc
Continental Carbon Inc—see Continental-Wirt Electronics Corp
Continental-Diamond Fibre Newark Del
Continental Electric Co 1234 S Prairie Ave (P O Box 895) Hawthorne Calif
Continental Electric Co Inc 325 Ferry St Newark 5 NJ
Continental Electric Equipment Co Box 1055 Cincinnati 1 Ohio
Continental Radiant Glass Heating Corp 4 W 40 St New York 18 NY
Continental Wire Corp P O Box 366 Wallingford Conn
Continental-Wirt Electronics Corp 26 W Queen Lane Philadelphia 44 Pa
CONTOURAMA—Dixie Controller Inc
CONTRA-DYNE—Square D Co Electric Controller & Mfg Div
CONTRA-TORQUE—Square D Co Electric Controller & Mfg Div
Control Panel Corp 4431 W Division St Chicago 51 Ill
Control Switch Div Controls Co of America 4218-30 W Lake St Chicago 24 Ill
CONTROLARC—Vickers Inc
CONTROLEAD—Marathon Special Products Corp
CONTROLENS—Holophane Co Inc
CONTROLITE—Line Material Industries
CONTROLITE—Ward Leonard Electric Co
CONTROLMAX—Sangamo Electric Co
Controls Co of America 2450 N 32 St Milwaukee 45 Wis
Controls Co of America Control Switch Div 1420 Delmar Dr Folcroft Pa
Convair Inc P O Box 9671 Pittsburgh 16 Pa
CONVERS-O-CALL—Adcrafters Co
CONVERTI-FUSE—General Electric Co Apparatus Sales
Cook's Son (Adam) Inc 5 N Stiles St Linden NJ
Cool-Amp Co 8603 W 17 Av Portland 19 Ore
COOL-CIRCLE-ATOR—Kisco Co Inc
Cool-ette Inc 7535 W 8 Mile Rd Detroit 21 Mich
COOL-SPOT—Signal Electric Div King-Seeley Corp
COOLAIR—American Coolair Corp
Coolerator Div—see McGraw-Edison Co Albion Div
COOLERO—Hirschman-Pohle Co Inc
COOLINE—Ohio Brass Co
Cooper (D C) Co 1467 S Michigan Ave Chicago 5 Ill
Cooper Hewitt Electric Co 720-732 Grand St Hoboken NJ
Co-operative Utilities Co Inc 4637-39 Mulberry St Phila 24 Pa
COPACO—Cottrell Paper Co Inc
COPALAM—Cottrell Paper Co Inc
Cope (T J) Div Rome Cable Corp Third & Walnut Sts Collegeville 5 Pa
COPING-LITE—Magni Flood Inc
COPPERHEAD—Chicago Expansion Bolt Co
COPPERPLY—National-Standard Co
COPPERTONE—Globe Lighting Products Inc
Copperweld Steel Co Wire and Cable Div Glassport Pa
Coppus Engineering Corp 344 Park Ave Worcester 10 Mass
Corborundum Co (Refractories Div)—see Globar
CORDETTE CASUALS—Moe Light Div Thomas Industries Inc
Cordomatic Div Vacuum Cleaner Corp of America 1724 W Indiana Ave Phila 32 Pa
CORDON—I-T-E Circuit Breaker Co
CORE BORE—Equipment Corp of America
CORE-O-MATIC—Induction Heating Corp
CORE VENT—Super Tool Co
CORE-VENT—U S Expansion Bolt Co
Cornell-Dubilier Electric Corp 333 Hamilton Blvd South Plainfield NJ
Corning Glass Works Corning NY
Cornish Wire Co Inc 50 Church St NY 7 NY
Corona Equipment Co Inc—see Corona Mfg Corp
Corona Mfg Corp 11300 Tuxford St Sun Valley Calif
CORONADO—Benjamin Div
CORNET—Jay Lighting Mfg Co Inc
COROPRENE—Cornish Wire Co Inc
COROPREX—Cornish Wire Co Inc
COROX—Westinghouse Electric Corp
COROLINE—Day-Brite Lighting Inc
CORRALUME—Day-Brite Lighting Inc
CORRECTOLITE—Holophane Co Inc
CORRIB—Ohmite Mfg Co
CORRIDOR-LITE—House-O-Lite Corp
CORRU-LUMINUS—Luminous Celings Inc
CORSAIR—Cellomatic Battery Corp
CORSAIR—Scranton Storage Battery Corp
CORVEL—Polymer Corp
COTENAMEL—Belden Mfg Co
Cottrell Paper Co Inc 10 Purchase St Fall River Mass
COUCH-CALL—Couch (S H) Co Inc
Couch (S H) Co Inc 3 Arlington St North Quincy 71 Mass
Counter & Control Corp 4503 W Brown Deer Rd Milwaukee 23 Wis
COUNTER-FLO—Electrend Products Corp
COUNTER-FLOW—Blue M Electric Co
COUNTERPOINT—Swivelier Co Inc
COVERLITE—Steber Div Pyle-National Co
Cox and Co Inc 115 E 23 St New York 10 NY
COZY GLOW—Westinghouse Electric Corp
CRADLECLIP—Electrovert Inc
CRAFT LITE—Paramount Industries Inc
CRAFTRITE—Ungar Electric Tools
CRAFTSCOPE—Waterman Products Co Inc
CRAFTSMEN—Tevco Insulated Wire
CRAM-IT—Kirel Inc
Cramer (R W) Co—see Cramer Controls Corp
Cramer Controls Corp Main St Centerbrook Conn
Crane (H W) Co 15 N 9th Ave Maywood Ill
CRANELITE—Holophane Co Inc
CraneVeyor Corp 1240 S Boyle Ave Los Angeles 23 Calif
CRESCENT—Abrams Lighting
CRESCENT—Barksdale Valves
CRESCENT—Wheeler Reflector Co
Crescent Co Inc 20 Central Ave Pawtucket RI
Crescent Insulated Wire Cable Co 319 N Olden Ave Trenton 5 NJ
Crescent Plastics Inc 955 Diamond Ave Evansville 7 Ind
Crescent Tool Co 200 Harrison St Jamestown NY
CRESCORD—Crescent Insulated Wire & Cable Co
CRESFLEX—Crescent Insulated Wire & Cable Co
CRESLINE—Crescent Plastics Inc
Crest Transformer Corp 1834-36 W North Ave Chicago 22 Ill
CRESTBRITE—Crest Transformer Corp
CRESTOLOY—Crescent Tool Co
CRESTRAN—Crest Transformer Corp
CRESTROL—Crest Transformer Corp
CRESYNTHOL—Crescent Insulated Wire & Cable Co
CRIMCUT—Vaco Products Co
CRIMPEE—Cannon Electric Co
CRIMPIT—Burndy Corp
Crise Controls Div—see Acro Div Robertshaw-Fulton Controls Co
Crittenden Transformer Works Inc 13011 S Spring St Los Angeles 61 Calif
CRODRUMS—Perfeclite Co
Crouse-Hinds Co Syracuse 1 NY
CROWN—Miller Co
Crown Industrial Products Co 713 Amsterdam St Woodstock Ill
Crownlite Fluorescent Co 7 Roselle St Mineola NY
Crozier Machine Tool Co 684 N Prairie Av Hawthorne Calif
Crucible Steel Co of America Oliver Bldg Mellon Sq Pittsburgh 22 Pa
CRYOLYTIC—Safe-T-Mike Corp
CRYSTAL—Royal Electric Corp
CRYSTAL VALVE—Delta-Star Electric Div
CRYSTALIER—Duro-Test Corp
CRYSTOPAL—Corning Glass Works
CUAL-AID—Penn-Union Electric Corp
CUBECELL—United Lighting & Ceiling Co
CRYOLYTIC—Safe-T-Mike Corp
Cummins-Chicago Corp—see Cummins Portable Tools Div John Oster Mfg Co
Cummins Portable Tool Div John Oster Mfg Co 5055 N Lydell Ave Milwaukee 17 Wis
CUPSON—Driver (Wilbur B) Co
Curran Engineering Co—see So-Cal Electro Products Inc
CURRENTROL—Lincoln Electric Co
CURTAIN OF LIGHT—Electronic Control Corp
CURTICELL—Curtis Lighting Div
Curtis Development & Mfg Co 3244 N 33 St Milwaukee 16 Wis
Curtis Lighting Div Curtis-All Brite Lighting Inc 6135 W 65 St Chicago 38 Ill
Curtis Lighting Inc—see Curtis Lighting Div
Curtis Mfg Co Refrigeration Div 1905 Kienlen Ave St Louis 20 Mo

CURTISTRIP—Curtis Lighting Div Curtis-All Brite Lighting Inc
CURVACORE—Allis-Chalmers Mfg Co
CURVETTE—Steber Div Pyle-National Co
Curvlite Surgical Products Co—see Mastercraft Plastics Co Inc
CUSTOM LINE—White-Rodgers Co
CUSTOM-TEN—Simpson (Mark) Mfg Co Inc
CUTAWL—International Register Co
Cutler Electrical Products Inc 5524 Haverford Ave Philadelphia Pa
Cutler-Hammer Inc 228 N 12th St Milwaukee 1 Wis
Cutler Industries Inc—see Cutler Light Mfg Co
Cutler Light Mfg Co 2026 N 22 St Phila 21 Pa
Cutler Sign Advertising Co—see Cutler Light Mfg Co
CYBERMOTOVE—Dalmotor Co
CYBERMOTEV—Dalmotor Co
CYCLO-CORE—New England Carbide Tool Co Inc
Cyclo-Freez Corp 6318 Cambridge Minneapolis 16 Minn
CYCLO-MONITOR—Counter & Control Corp
CYCLO-TWIST—New England Carbide Tool Co Inc
CYCLOHM—Howard Industries Inc
CYCLONE—Chisholm-Moore Hoist Div Columbus McKinnon Corp
CYCLONE—Scranton Storage Battery Corp
CYLENT—Brook Motor Corp
CYLINDRICELL—United Lighting & Ceiling Co

D

DFI—Designers for Industry Inc
D H D—Diamond Expansion Bolt Co Inc
DHS—Distribution & High Line Specialties Co
DL—Derrick Light & Equipment Co
DPR Inc—see Hardman (H V) Co Inc
D & R Ltd 402 E Gutierrez St P O Box 1500 Santa Barbara Calif
DTX—Diamond Wire & Cable Co
DA-N-ITE—Premax Products Div
DUF—Diamond Wire & Cable Co
Dage Television Div Thompson Products Inc Michigan City Ind
DAGLAS—Phelps Dodge Copper Products Corp
DAISY—American Pulley Co
Dake Corp 724 Robbins Rd Grand Haven Mich
Dake Engine Co—see Dake Corp
Dalmotor Co 1375 Clay St Santa Clara Calif
Dalmotron Co 534 Laurel St San Carlos Calif
Dalton Electric Heating Co 11 Goodhue St Salem Mass
DAMCO—Murray (D A) Co Inc
DAMPCOAT—Wilbur & Williams Co
Dampp-Chaser Inc 1404 Spartanburg Hwy Hendersonville NC
Dana Fan & Blower Corp 2644 Colerain Ave Cincinnati 14 Ohio
Dante Electric Mfg Co. Bantam Conn
DARAY—Lightolier Inc
DART DRILL—Arro Expansion Bolt Co
DATA MATRIX—Dialight Corp
DATA STRIP—Dialight Corp
DATALITE—Dialight Corp
Davenport Mfg Co—see Davenport Mfg Div Duncan Electric Co Inc
Davenport Mfg Div Duncan Electric Co Inc 2532 N Elston Ave Chicago 47 Ill
DAVEY—Vibrascope Co
Davids Gloves Inc 21 W Pleasant St Springfield Ohio
Davidson Fan Co 213 California St Newton 58 Mass
Davis (Dean W) Co—see Dormeyer Industries
Davis Electric Co 28 Parker St Wallingford Conn
Davis Mfg Co Inc 1500 S Mclean Blvd Wichita Kans
Day-Brite Lighting Inc 6260 N Broadway St Louis 15 Mo
DAY-LINE—Day-Brite Lighting Inc
Day-Ray Products Inc 1133 Mission St South Pasadena Calif
DALANITE—Price Bros Inc
DAYLUME—Day-Brite Lighting Inc
DAYSTAR—Lighting Products Inc
Daystrom Inc Weston Instruments Div 614 Frelinghuysen Ave Newark 12 NJ
Dayton Electric Laboratory—see Delco Products Div General Motors Corp
Dayton Electric Mfg Co 126 S Oakley Blvd Chicago 12 Ill
Dayton Industrial Products Co Melrose Park Ill
Dayton Precision Mfg Co 213 N Becket St Dayton 3 Ohio
Dayton Pump & Mfg Co—Taitco Div Tait Mfg Co
Dayton Safety Ladder Co 2337 Gilbert Ave Cincinnati 6 Ohio
DAZIC—Winterburn Mfg Co
Dazor Mfg Corp 4481-99 Duncan Ave St Louis 10 Mo
DAZY—Arro Expansion Bolt Co
DE-FROST-IT—Paragon Electric Co
DE-ION—Westinghouse Electric Corp
DE-LUXE—Premax Products Div Chisholm-Ryder Co Inc
DEAN—Solar Light Mfg Co
DeBothezat Fans Div American Machine & Metals Inc East Moline Ill
DECALS—Chicago Decalcomania Co
DECATHLON—Litecraft Mfg Corp
DECORALITE—Miller Co
DECRO-LITE—Westinghouse Electric Corp Lamp Div
DEFENSE LIGHT—Electric Cord Co
DeJur-Amsco Corp 4501 Northern Blvd Long Island City 1 NY
DEKORON—Republic Steel Corp
Delco Products Div General Motors Corp 329 E 1st St Dayton 1 Ohio
DELTA—L & P Lighting
Delta Chemical Works Inc 23 W 60 St New York 23 NY
Delta-Star Electric Co—see Delta-Star Electric Div
Delta-Star Electric Div H K Porter Co Inc 2437 Fulton St Chicago 12 Ill
Delta-Star Electric Div Hill Transformer Works H K Porter Co Inc 1030 Washington St San Carlos Calif
DELTABESTON—General Electric Co
DELUXE SECRETARIAL—Linemaster Switch Corp
DEMCO—Dayton Electric Mfg Co
DEMKOTE—Dayton Electric Mfg Co
DENEL—Electric Cord Co
Denison (R B) Mfg Co 386 Broadway Bedford Ohio
DENSHEATH—Anaconda Wire & Cable Co
DENSITROL—Precision Thermometer & Instrument Co
DENTROL—Anaconda Wire & Cable Co
DEPEND-A-TROL—Acro Switch Div
Dependable-Electric Mfg Co Inc 537 Johnson Ave Brooklyn 37 NY
DERBY—Day-Brite Lighting Inc
DERNGOOD—Snyder (M L) & Son Inc
Derrick Light & Equipment Co 1201 E Daggett (PO Box 414) Fort Worth Tex
Derrick Light Inc—Derrick Light & Equipment Co
DESIGNER GROUP—Curtis Lighting Div
Designers for Industry Inc 4241 Fulton Pkwy Cleveland 9 Ohio
DESOUTTER—Newage Industries Inc
DESPARD—Pass & Seymour Inc
Despatch Oven Co 619 S E 8th St Minneapolis 14 Minn
DETACABLE—Times Wire & Cable Div
DETECT-A-FIRE—Fenwal Inc
DETECT-A-FLO—Fenwal Inc
DETECTA-FAZE—Glo-Lite Instrument Co
DETECTO-LITE—Eagle Electric Mfg Co Inc
DETERMOHN—Ohmite Mfg Co
Detroit Controls Div—see American-Standard Controls Div
Detroit Electric Furnace Div Kuhlman Electric Co 11400 State Fair Ave Detroit Mich
Detroit Hoist & Machine Co 8292 Morrow St Detroit 11 Mich
Detroit Industrial Products Co—see Gardner Products Co
Detroit Lubricator Co—see American-Standard Controls Div
Detroit Sheet Metal Co—see Young Bros Co
Detroit Sintered Metal Corp—see Bunting Brass & Bronze Co
DETROITER—Detroit Hoist & Machine Co
DeVilbiss Co 300 Phillips Ave Toledo 1 Ohio
DeWalt Div American Machine & Foundry Co—see Dewalt Inc
DeWalt Inc Fountain Ave Lancaster Pa
DeWalt Products Corp—see DeWalt Inc
DEXTRA LITE—Swivelier Co Inc
Di-Acro Corp 427 Eighth Ave Lake City Minn
DI-CLAD—Continental-Diamond Fibre
DI-EL-ITE—Railroad Accessories Corp
DI-EN-KEY—Diamond Expansion Bolt Co Inc
DI-FORGE—Diamond Expansion Bolt Co Inc
DI-STAMPT—Diamond Expansion Bolt Co Inc
DIACTOR—General Electric Co
DIAFILE—Co-operative Utilities Co Inc
DIAL-A-FLO—General Control Co
DIAL-IN—Auth Electric Co Inc
DIAL SAW—Erwood Inc
DIALCHEK—Allen Electric and Equipment Co
DIALCLOR—Sangamo Electric Co
DIALCO—Dialight Corp
Dialight Corp 60 Stewart Ave Brooklyn 37 NY
DIAMALLOY—Diamond Tool and Horseshoe Co
DIAMIDE—Diamond Expansion Bolt Co Inc
DIAMOND—Cannon Electric Co
DIAMOND—Eagle Electric Mfg Co Inc
Diamond Calk Horseshoe Co—see Diamond Tool and Horseshoe Co
DIAMOND-D—Co-operative Utilities Co Inc
DIAMOND F—Federal Lighting Corp
DIAMOND-H—Hart Mfg Co
Diamond Expansion Bolt Co Inc Garwood NJ
Diamond Power Specialty Corp P O Box 415 Lancaster Ohio
DIAMOND SEAL—Snyder (M L) & Son Inc
Diamond Tool and Horseshoe Co 4702 Grand Ave Duluth 7 Minn
Diamond Wire & Cable Co 445 Park Ave Sycamore Ill
DIAN-IN—Auth Electric Co Inc
Dice (J W) Co Englewood NJ
Dicke Tool Co 1201 Warren Ave Downers Grove Ill
Dickey-Grabler Co 10302 Madison Ave Cleveland 2 Ohio
Diehl Mfg Co 1187 Finderne Ave Somerville NJ
DIELUX—Prescolite Mfg Corp
Dietz (Henry G) Co Inc 12-16 Astoria Blvd Long Island City 2 NY
DIFFUSO—Appleton Electric Co
DIGIMOTOR—Ledex Inc
DIGITRONIC—Weltronic Co
DILECTO—Continental-Diamond Fibre
Dillin (Frank W) Corp 315 W Adams Blvd Los Angeles 7 Calif
DIM-A-LITE—Minneapolis-Honeywell Regulator Co
Dings Brakes Inc 4740 W Electric Ave Milwaukee 46 Wis
DIP-PAK—Fidelity Chemical Products Corp
DIRECT-A-CALL—Simpson Mfg Co Inc
DIRECTOLITE—Line Material Industries
DIRECTOR—Industrial Lamp Corp
DIRECTROL—Automatic Control Co
DIRECTRON—Sanford Miller Co Inc
DISCOVERER—York Div Borg-Warner Corp
DISINFECTAIRE—Art Metal Lighting Div
DISKONECT—Appleton Electric Co
DISPLAYOLITE—Ruby-Philite Corp
Distribution & High Line Specialties Co 2100 Del Norte St Louis 17 Mo
DITCH MIDGET—Mercury Hydraulics
DITCH WITCH—Charles Machine Works Inc
DIVCO—Division Lead Co
DIVIDOHM—Ohmite Mfg Co
Division Lead Co 7742 W 61st Place Summit Ill
Dixie Controller Inc Post Office Box 5844 Birmingham 9 Ala
Dixie Electrical Mfg Co P O Box 6325 Birmingham 7 Ala
Dixie Radiant Glassheat Co—see Dixie Raydiant Electric Heat Corp
DIXIE RAY—Dixie Raydiant Electric Heat Corp
Dixie Raydiant Electric Heat Corp 66 Eleventh St NE Atlanta 9 Ga
Djeco Div Djordjevic Engineering Co 1933 N Damen Ave Chicago 47 Ill
D'LUX LINE—White-Rodgers Co
DO-ALL—Cable Electric Tool Corp
DO-ALL—Wodack Electric Tool Corp
DOC—All-State Welding Alloys Co Inc
Dockson Corp 3839 Wabash Ave Detroit 8 Mich
Doelcam Corp—see Minneapolis-Honeywell Co Boston Div
Dolco Mfg Co 2350 Curry St Long Beach 5 Calif
Dolph (John C) Co—Monmouth Junction NJ
DOME ALZAK—Guth (Edwin F) Co
DOMELITE—Miroflector Co Inc
DOMEX—Lightolier Inc
Dominion Electric Corp 150 Elm St Mansfield Ohio
Dongan Electric Mfg Co 2987-3001 Franklin St Detroit 7 Mich
DONUT—Associated Research Inc
DONWOOD—Sierra Electric Corp
Doors & Operators Inc—see Quincy Mfg Co
Dormeyer Industries 3418 Milwaukee Ave Chicago 41 Ill
Dorsey (John E) Co 570 E First St Boston 27 Mass
DOS-LUG—Dossert Mfg Corp
DOSLOY—Dossert Mfg Corp
Dossert Mfg Corp 249-255 Huron St Brooklyn 22 NY
DOSSON—Dossert Mfg Corp
DOSTEX—Dossert Mfg Corp
DOSULON—Dossert Mfg Corp
DOUBLE-DIAMOND—H-B Instruments Co
DOUBLE ENGINEERED—Metalectrics Inc
DOUBLE-KOOL—Hastings Air Conditioning Co Inc
DOUBLENCLOSED—U S Electrical Motors Inc
DOUBLEX—Johns-Manville
Dow Corning Corp Midland Mich
DOWNLITE—Rambusch Decorating Co
Doyle (J E) Co 1220 W 6th St Cleveland 13 Ohio
Doyle Electric Dryer—see Doyle (J E) Co
Doyle Vacuum Cleaner Co 234 Stevens St S W Grand Rapids Mich
DRACO—Versen (Kurt) Co
Drake Mfg Co 4626 N Olcott Harwood Heights Chicago 31 Ill
DRAMALITE—Century Lighting Inc
DREADNAUGHT—Metalcraft Products Co Inc
Dreier Brothers Inc 7301 Woodlawn Ave Chicago 19 Ill
DREXEL—Keystone Electric Mfg Co
DRI-CEIL—Ceilheat Inc
DRI-FILM—General Electric Co
DRI-LOK—Jefferson Electric Co
DRI QUIK—Dry Clime Lamp Corp
DRI-TRAN—Land-Air Inc
DRILFAST—U S Expansion Bolt Co
DRILL-HAMMER—Rawlplug Co Inc
DRITHERM—North American Electric Lamp Co
DRIVE POINT—Hubbard & Co
Driver (Wilbur B) Co 1875 McCarter Highway Newark 4 NJ
DRUM KING—American Pulley Co
Dry Clime Lamp Corp Greenburg Ind
DRY-EX—Acme Industries Inc
DRYGALV—American Solder & Flux Co
DRYMASTER—Dryomatic Corp
Dryomatic Corp 715 N Fayette St (P O Box 591) Alexandria Va
DRYVIN—Star Expansion
DU-OP—General Control Co
DUA-LITE—Curtis Lighting Div
DUAFUEL—Nordberg Mfg Co
DUAL ARC—Electric Arc Inc
DUAL-BEAM—Cable Electric Products Inc
DUAL-FIN—Electrovector Inc
DUAL GRIP—Weaver (J A) Co
DUAL-HEAT—Jensen Inc
DUAL LITE—Mechanical Industries Production Co
Dual-Lite Co Inc Newtown Conn
DUALBRITE—Walker Brothers
DUALCOTE—Walker Brothers
DUALENS—Garcy Lighting Div—Garden City Plating & Mfg Co
DUALTRONIC—Goldak Co Inc
DUB-L-PLUG—Superior Electric Co
DuBois Electric Storage Battery Co 500 W DuBois Ave DuBois Pa
DUCK-VAR—Electro-Technical Products Div
DUCT-FREE—Broan Mfg Co Inc
DUCTATHERM—Mercoid Corp
Duff-Norton Co P O Box 1889 Pittsburgh 30 Pa
DuKane Corp St Charles Ill
Dumore Co 1300 17th St Racine Wis
DUMPER—Allied Mfg & Sales Co
Duncan Electric Mfg Co Lafayette Ind
DUNCO—Struthers-Dunn Inc

Dunton (M W) Co 350 Kinsley Ave Providence RI
DUO-DRILL—Cummins Portable Tool Div
DUO-JOBMASTER—Ramset Fastening System
DUOCARB—Driver (Wilbur B) Co
DUOCONE—Lightolier Inc
DUOLET—Millerbernd Mfg Co
DUOTROL—Automatic Control Co
DUPLEX—Newark District Telegraph Co
DURA CRIMP—Anderson Electric Corp
Dura Electric Lamp Co Inc 62 E Bigelow St Newark 8 NJ
DURA GRIP—Anderson Electric Corp
DURA LUG—Anderson Electric Corp
DURA-TAP—Anderson Electric Corp
DURA-TEMP—General Blower Co
DURA WELD—Anderson Electric Corp
DURABAKE—S & C Electric Co
DURABLE—Seager Standard Carbon Co
DURAC—H-B Instrument Co
DURACODE—Anaconda Wire & Cable Co
DURACORD—Anaconda Wire & Cable Co
DURALEAD—Tevco Insulated Wire
DURALEER—Duray Fluorescent Mfg Co
DURALINE—Anaconda Wire & Cable Co
Duralite Lanterns Inc 163 Long Beach Rd Island Park NY
DURALOX—Anaconda Wire & Cable Co
DURALYTIC—Safe-T-Mike Corp
DURAMATIC—Dura Electric Lamp Co Inc
Durant Mfg Co 1900 N Buffton St Milwaukee 1 Wis
DURAPRENE—Anaconda Wire & Cable Co
DURASEAL—Anaconda Wire & Cable Co
DURASHEATH—Anaconda Wire & Cable Co
DURATACH—Wheeler Reflector Co
DURATRAK—General Radio Co
Duray Fluorescent Mfg Co 3318 W Montrose Ave Chicago 18 Ill
DUREX—Duro-Test Corp
DUREX—Wheeler Reflector Co
DURIUM—Brundy Corp
DURO-BITE—Duro Fittings Co
Duro Fittings Co 2210 S Davie Ave Los Angeles 22 Calif
DURO-FLEX—Duro-Test Corp
DURO-HUB—Duro Fittings Co
DURO-LET—Duro Fittings Co
Duro Metal Products Co Kildare & Schubert Sts Chicago Ill
Duro-Test Corp 2321 Hudson Blvd North Bergen NJ
DUROC—Cellomatic Battery Corp
Durolet Mfg Co—see Red Seal Electric Co
DUSTFOE—Mine Safety Appliances Co
DUSTITE—Adam (Frank) Electric Co
DUTCH BOY—National Lead Co
DUTRAX—Anaconda Wire & Cable Co
DUTYMASTER—Master Electric Div Reliance Electric & Engineering Co
DUWEL—Electro Engineering Products Co Inc
DUZ-ALL—Siebring Mfg Co
DVILSET—U S Expansion Bolt Co
Dwyer (F W) Mfg Co Woodland at Greenwood (PO Box 373) Michigan City Ind
DYCAP—Electro Dynamics Corp
DYMODRILL—Milwaukee Electric Tool Corp
DYN-AUT-RONIC—Gisholt Machine Co
DYNA-TORQ—Dynamatic Div
DYNACHROME—Whitney Blake Co
DYNALITE—Compco Corp
Dynamatic Div Eaton Mfg Co 3122 14th Ave Kenosha Wis
DYNAMIC BETA—Hickok Electrical Instrument Co
DYNAMOTIVE—Automatic Transportation Co
DYNAPOWER—Carol Cable Co
DYNAPOWER—Crescent Co Inc
DYNAPRENE—Whitney Blake Co
DYNARAY—Electro Powerpacs Inc
DYNASEAL—Whitney Blake Co
Dynaseal Lighting Corp—see Electro Powerpacs Inc
DYNASPEDE—Dynamatic Div
DYNATACH—Electric Tachometer Corp
DYNATROL—Automation Products Inc
DYNETRIC—Gisholt Machine Co
DYNETRIC—Westinghouse Electric Corp
DYNOGRAPH—Annis (R B) Co
DYROSEC—Kaiser Aluminum & Chemical Sales Inc

E

E-LITE—Guth (Edwin F) Co
EC&M—Square D Co Electric Controller & Mfg Div
E J S Lighting Corp 321 E Pico Blvd Los Angeles 21 Calif
EMC—Howard Industries Inc
ERP—Wallace & Tiernan Inc
ETC Inc 990 E 67 St Cleveland 3 Ohio
EZ—Henderson Electric Co
E-Z—Penn-Union Electric Corp
E-Z CODE—Westline Products Div Western Lithograph Co
E-Z CUTTER—Collins Machinery Corp
EZ SERVICER—Wiley (R & W) Inc
E-Z STRIPPER—Ideal Industries Inc
E-Z TALK—Simpson (Mark) Mfg Co Inc
EAGALINE—Eagle Electric Mfg Co Inc
EAGALOK—Eagle Electric Mfg Co Inc
Eagle Electric Mfg Co Inc 23-10 Bridge Plaza South Long Island City 1 NY
Eagle Mfg Co 3508 Avalon Blvd Los Angeles 11 Calif
Eagle-Picher Co American Building Cincinnati 1 Ohio
Eagle Plastics Co—see Eagle Electric Mfg Co Inc
Earl (H W) & Co 6225 S W 8th St Miami 44 Fla
Earl Electric Mfg Corp 35-20 Borden Ave Long Island City NY
Early (Edward E) Co 1129 5th St N W Canton 3 Ohio
Earthworm Boring Machine Inc 1415 14th St (P O Box 1100) Santa Monica Calif
Easco Products Inc P O Box 587 Ypsilanti Mich
EASTERN—Circle F Mfg Co
Eastern Insulated Wire Corp Trenton NJ
Eastern Specialty Co 3617 N 8th St Phila 40 Pa
Eastern Tube & Tool Co Inc—see Ettco Wire & Cable Corp
EASTEX—Circle F Mfg Co
Easy-Heat Inc 555 N Michigan St Lakeville Ind
EASY TACH—Quadrangle Mfg Co
EASY WIRE—Gem Electric Mfg Co Inc
Ebco Mfg Co 265 N Hamilton Rd Columbus 13 Ohio
Ebert Electronics Corp 212-26 Jamaica Ave Queens Village 28 LI NY
ECLIPSE—Frick Co
ECO—Economy Fuse Div
ECOA—Equipment Corp of America
ECON—Economy Fuse Div
ECON-O-MATIC—American Pulley Co
ECON-O-MIZER—Acme Industries Inc
ECONALFLOOD—Appleton Electric Co
ECONO-STAKE—Duro Fittings Co
ECONO-WATT—Redmond Co Inc
ECONO-WISE—Project Fixture Mfg Corp
ECONICOM—Simpson (Mark) Mfg Co Inc
ECONOFONE—Simpson (Mark) Mfg Co Inc
ECONOLINE—Duro Fittings Co
ECONOMY—Arex Co
ECONOMY—Coates Electric Mfg Co
ECONOMY—Keystone Electric Mfg Co
Economy Engineering Co 4511 West Lake St Chicago 24 Ill
Economy Fuse Div Federal Pacific Electric Co 2070 Maple St Des Plaines Ill
Economy Fuse & Mfg Co—see Economy Fuse Div
EDCO—Eynon-Dakin Co
Edco International Corp 20722 W Seven Mile Road Detroit 19 Mich
EDDYMAG—Square D Co Electric Controller & Mfg Div
Ederer Engineering Co 2943 1st Ave S Seattle 4 Wash
EDGE-GLO—Curtis Lighting Div
Edison Heatube Div—see McGraw-Edison Co Albion Div
Edison (Thomas A) Industries McGraw-Edison Co Storage Battery Div West Orange NJ
EDISON TROPIC-AIRE—McGraw-Edison Co Albion Div
Edmor Lamp Co Inc 1867 Flatbush Ave Brooklyn 10 NY
EDUCATOR—Lighting Products Inc
Edwards Co Inc Norwalk Conn
EDYCO—Electro Dynamics Corp
EECO—Marvin Electric Mfg Co
EFCOR—Electrical Fittings Corp
EFCORLET—Electrical Fittings Corp
Efficiency Electric & Mfg Co Park Ave Ext P O Box 30 East Palestine Ohio
EFFICO—Hirschman-Pohle Co Inc
Eicor Div F L Jacobs Co 4235 W North Ave Chicago 39 Ill
Eicor Inc—see Eicor Div
Eisenstat (David)—see Metalectrics Inc
Eisler Engineering Co Inc 750 S 13 St Newark 3 NJ
EITHEREND—Anderson (Albert & J M) Mfg Co
EKTACOM—Fisher Berkeley Corp
Elastic Stop Nut Corp of America Elizabeth Div 1027 Newark Ave Elizabeth NJ
ELBENDERS—Henderson Electric Co
ELBOLIFT—Automatic Transportation Co
Eldon Industries Inc—see Ungar Electric Tools Div of Eldon Industries Inc
ELEC-TROL-FEED—Delta-Star Electric Div
ELECTR-O-LINE—Minneapolis-Honeywell Regulator Co Industrial Div
ELECTR-O-PULSE — Minneapolis-Honeywell Regulator Co Industrial Div
ELECTR-O-VANE—Minneapolis-Honeywell Regulator Co Industrial Div
ELECTR-O-VOLT—Minneapolis-Honeywell Regulator Co
Electra Insulation Corp 33-30 57th St Woodside 77 NY
Electra Mfg Co 4051 Broadway Kansas City Mo
Electra Motors Inc 1110 N Lemon St Anaheim Calif
Electran Mfg Co 1901 Clybourn Ave Chicago 14 Ill
Electrend Products Corp State & Water Sts (Box 110) St Joseph Mich
ELECTRESTEEM—Electric Steam Radiator Corp
ELECTRI-CENTER—I-T-E Circuit Breaker Co BullDog Electric Products Div
Electri-Cord Mfg Co Inc 2554-2568 E 18 St Brooklyn 35 NY
Electri-Flex Co Roselle Ill
Electric Arc Inc 152 Jelliff Ave Newark 8 NY
Electric Boat Co—see Electro Dynamic Div General Dynamics Corp
Electric Controller & Mfg Co—see Square D Co Electric Controller & Mfg Div
Electric Cord Co 432 Plane St Newark 2 NJ
Electric Deodorizer Corp—see Edco International Corp
Electric Distribution Products Inc 2200 31st St S W Allentown Pa
ELECTRIC DOORMAN—Electric Power Door Co Inc
ELECTRIC FLOWER—Aerolux Lights Corp
Electric Heating Products Inc—see Everwarm Inc
Electric Hose & Rubber Co 12th & Dure Sts Wilmington Del
Electric Hotpack Co Inc Cottman Ave at Melrose St Phila 35 Pa
Electric House Number Co 8670 W Washington Blvd Culver City Calif
Electric Indicator Co Inc Camp Ave Springdale Conn
Electric Jobbers Suppliers Corp—see EJS Lighting Corp
Electric Lighting Sales Inc P O Box 1907 Stockton Calif
ELECTRIC-LUMINUS—Luminous Ceilings Inc
Electric Machinery Mfg Co 800 Central Ave Minneapolis 13 Minn
Electric Materials Co Box 390 North East Pa
Electric Motor Corp—see Howard Industries Inc
Electric Motors & Specialties Inc King & Hamsher Sts Garrett Ind
Electric Number Co—see Electric House Number Co
Electric Power Door Co Inc 2127 E Lake St Minneapolis 7 Minn
Electric Power Plants Corp—see U S Electric Motor Co
Electric Products Co 1725 Clarkstone Rd Cleveland 12 Ohio
Electric Railway Equipment Co—see Elreco Corp
Electric Railway Improvement Co—see Erico Products Inc
Electric Re-Light Co Uniman Pl at S Goodman Rochester 20 NY
Electric Regulator Corp Norwalk Conn
Electric Service Co—see Delta-Star Electric Div H K Porter Co Inc
Electric Service Systems Inc 1330 Quincy St N E Minneapolis 13 Minn
Electric Soldering Iron Co Inc West Elm St Deep River Conn
Electric Specialty Co 211 South St Stamford Conn
Electric Steam Radiator Corp 1 Electric Ave Paris Ky
Electric Switch Corp 2320 S Tibbs Ave (P O Box 41037) Indianapolis 41 Ind
Electric Tachometer Corp 68th & Upland Sts Phila 42 Pa
Electric Tube Products 74-16 Grand Ave Maspeth NY
Electric Tubular Products Inc—see Electric Tube Products
Electrical Engineers Equipment Co 25th Ave & Division St Melrose Park Ill
Electrical Facilities Inc—see Knopp Inc
Electrical Fittings Corp 37-50 57th St Woodside 77 NY
Electrical Mfg Co 425 Lake Ave Racine Wis
Electrical Windings Inc 2015 N Kolmar Ave Chicago 39 Ill
Electrical Service Co—see Esco Mfg Co
ELECTRICITY'S SAFETY VALVE—Bussmann Mfg Div
ELECTRICTUBE—Mark (Clayton) & Co
ELECTRIK—Minneapolis-Honeywell Regulator Co Industrial Div
ELECTRO—Dunton (M W) Co
ELECTRO-CAM—Warner Electric Brake & Clutch Co
Electro Compound Co 4145 W 150 St Cleveland 35 Ohio
ELECTRO-COOLER—Allis-Chalmers Mfg Co
Electro Devices Inc 4648 Easton Ave St Louis 13 Mo
Electro Devices Inc 580 Main St Wilmington Mass
Electro Dynamic Div General Dynamics Corp 163 Ave A Bayonne NJ
Electro Dynamics Corp 4917 St Elmo Ave Bethesda 14 Md
Electro Engineering Products Co Inc 609 W Lake St Chicago 6 Ill
Electro Engineering Works 401 Preda St San Leandro Calif
Electro-Graphic Graver Co P O Box 265 Toledo 1 Ohio
ELECTRO-FLO—Hays Mfg Co
ELECTRO-GARD—Perfeclite Co
ELECTRO-LARM—Electro Devices Inc
Electro Lift Inc 204 Sargeant Ave Clifton NJ
Electro Lighting Corp 1536 S Paulina St Chicago 8 Ill
Electro Luminaire Corp—see Electro Lighting Corp
ELECTRO MAT—Interstate Rubber Products Corp
Electro Mechanical Devices Co—see Nankervis (Geo L) Co
Electro-Mechanical Instrument Co 8th & Chestnut Sts Perkasie Pa
Electro-Mechano Co 241 E Erie St (EM) Milwaukee 2 Wis
ELECTRO-PANE—Electro Devices Inc
Electro Powerpacs Inc 5 Hadley St Cambridge 40 Mass
ELECTRO-PROBE—Erwood Inc
Electro-Products Mfg Co—see Electro-Ray Mfg Co
Electro-Ray Mfg Co 8310 N E Highway 99 Vancouver Wash
ELECTRO-SHEAVE—Warner Electric Brake & Clutch Co
Electro Silv-A-King Corp—see Electro Lighting Corp
Electro-Snap Switch & Mfg Co—see Controls Co of America Control Switch Div
Electro Switch Corp—King Ave Weymouth 88 Mass
Electro-Technical Products Div Sun Chemical Corp 113 E Centre St Nutley 10 NJ
ELECTRO-WIND—Allen Cooler & Ventilator Inc
ELECTROFIN—Berko Electric Mfg Corp
Electroflow Inc—see American Electronics Inc
ELECTROFLUID—Link-Belt Co
ELECTROLETS—Killark Electric Mfg Co
Electroline Mfg Co 2622 E 51st St Cleveland 4 Ohio
Electromaid Corp—see Can Arm Corp
ELECTROMATIC—National Time & Signal Corp
ELECTROMATIC—Siebring Mfg Co
ELECTROMITE—Hays Mfg Co
Electromode Div Commercial Controls Corp P O Box 1052 Rochester 3 NY
ELECTRONIC BUTLER—Simpson (Mark) Mfg Co Inc

Electronic Center—see Dalmotron Co
Electronic Control Corp 15341 Dale Detroit 23 Mich
ELECTRONIC-DIRECTOR—Simpson (Mark) Mfg Co Inc
Electronic Measurements Co Inc Lewis St & Maple Ave Eatontown NJ
ELECTRONIC WITCH—Fisher Research Laboratory Inc
Electronics Corp of America One Memorial Dr Cambridge Mass
ELECTRONIK—Minneapolis-Honeywell Regulator Co Industrial Div
ELECTROPULT—Westinghouse Electric Corp
Electrosnap Corp—see Controls Co of America Control Switch Div
ELECTROSTART—Lake Shore Electric Corp
ELECTROSTRIP—I-T-E Circuit Breaker Co BullDog Electric Products Div
Electrovector Inc 475 Flushing Ave Brooklyn 5 New York
Electrovert Inc 124 E 40 St New York 16 NY
ELECTROWELD—Electric Arc Inc
ELECTRUNITE—Republic Steel Corp
ELEGANCE—White-Rodgers Co
ELEMEX—Line Material Industries
ELFCO—Everglow Lighting Fixture Co Inc
Elgin National Watch Co Electronics Div 2435 N Naomi St Burbank Calif
ELIED—Farrelloy Co
ELINCO—Electric Indicator Co Inc
ELIPSO—Appleton Electric Co
ELIPTICONE—Art Metal Lighting Div
ELIPTISQUARE—Art Metal Lighting Div
ELIPTOR—Revere Electric Mfg Co
Elite Glass Co Inc 111 W 22nd St New York 11 NY
Elite Import Co—see Elite Glass Co Inc
Eliza Metal Products Co Box 408 Bridgeville Pa
ELJAY—Segil (L J) Co
ELKOLOY—Mallory (P R) & Co Inc
ELKONITE—Mallory (P R) & Co Inc
ELKONIUM—Mallory (P R) & Co Inc
Ellanar Chemical Co—see London Chemical Co Inc
ELLARM—Ellenco Inc
ELLBELL—Ellenco Inc
Ellenco Inc 3322 M St N W Washington 7 DC
Elliott Co Jeannette Pa
Elliott Electric Mfg Corp 50-30 98th St Corona 68 NY
Elliott Electric Products Co—see Elliott Electric Mfg Corp
ELLIPTI-FLOOD—Electro Lighting Corp
ELLITE—Ellenco Inc
Ellman Co—see Ellenco Inc
Ellmann Engineering Co—see Ellenco Inc
ELPAR—Elwell-Parker Electric Co
ELRAD—Westchester Brickote Products Co Inc
Elreco Corp 2000 Central Ave Cincinnati 14 Ohio
ELTAP—Burndy Corp
ELTEX—Electro-Technical Products Div Sun Chemical Corp
Elwell-Parker Electric Co 4319 St Clair Ave Cleveland 3 Ohio
Emarco Corp 1950 Neva Drive Dayton 14 Ohio
EMCO—Earl Electric Mfg Corp
EMCO—Ender-Monarch Corp
EMD-COM—Wing (L J) Mfg Co
EMERG-O-MATIC—Dixie Controller Inc
Emerson Apparatus Co 171 Tremont St Melrose Mass
Emerson Electric Mfg Co 8100 Florissant Ave St Louis 36 Mo
Emerson-Imperial Lighting Co Loyalhanna Park Latrobe Pa
Emerson Plastics Corp 1383 Seabury Ave Bronx 61 NY
Emerson-Pryne Co Towne Ave at Monterey (P O Box 698) Pomona Calif
EMICO—Electro-Mechanical Instrument Co
EMPIRE—Cam-Lok Div Empire Products Inc
EMPIRE—Diamond Expansion Bolt Co Inc
Empire Corp 1566 S 83rd St Milwaukee 14 Wis
Empire Products Inc—Cam-Lok Div Empire Products Inc
Empire Switchboard Co Inc 810 Fourth Ave Brooklyn 32 NY
Enameled Metals Co—see Pittsburgh Standard Conduit Co
ENAMELITE—Republic Steel Corp
ENAMELKOTE—Mark (Clayton) & Co
ENCLOSURES UNLIMITED—Burns (James F) Co
Ender-Monarch Corp 141 Lanza Ave Garfield NJ
ENDON—Pollack Luminescent Corp
ENDON—Voltarc Tubes Inc
ENDOVAL—Revere Electric Mfg Co
ENDULATOR—Rusgreen Mfg Co
ENDURITE—Crescent Insulated Wire & Cable Co
ENDURPRENE—General Insulated Wire Works
Engelhard (Charles) Inc—see Engelhard Industries Inc
Engelhard Industries Inc 113 Aster St Newark 5 New Jersey
Engelhard Industries Inc Industrial Equipment Div Instruments & Systems Sec 850 Passaic Ave East Newark NJ
ENGINATORS—Waukesha Motor Co
ENPO—Piqua Machine & Mfg Co
ENTERITE—General Cable Corp
ENVOY—Keystone Electric Mfg Co
EONITE—Kaiser Aluminum & Chemical Sales Inc
EPCO Electronics Inc 140 Liberty St NY 6 NY
EPI-GLAS—Electro-Technical Products Div
EPOSET—Hardman (H V) Co Inc
EPOXIGLAS—Chance (A B) Co
Equipment Corp of America 1537 Superior Ave Cleveland 14 Ohio
ERECT-A-LIFT—Allied Mfg & Sales Co
ERICKSON—Thomas & Betts Co
Erickson Power Lift Trucks Inc St Anthony Blvd & University Ave NE Minneapolis 18 Minn
Erickson Special Equipment Mfg Co—see Erickson Power Lift Trucks Inc
Erico Products Inc 2070 E 61 Place Cleveland 3 Ohio
Ericson Mfg Co 1660 Hayden Ave Cleveland 12 Ohio
Erie Glass Mfg Co 564 Union Trust Bldg Pittsburgh 19 Pa
Erie Malleable Iron Co Kondu Div—see Kondu Corp
Erie Sales & Mfg Co—see Erie Glass Mfg Co
Erie Tool Works 12th & Liberty Sts Erie Pa
Erwood Inc 1770 Berteau Ave Chicago 13 Ill
ESCO—Electric Specialty Co
ESCO—Electro Switch Corp
Esco Mfg Co P O Box 1039 Greenville Tex
ESCORT—Stevens Appliance Truck Co
ESICO—Electric Soldering Iron Co Inc
ESS—Electric Service Systems Inc
Ess Instrument Company—see Photomation Inc
Ess Specialty Co—see Photomation Inc
Essex Wire Corp Wire & Cable Div 2601 S Adams Marion Ind
ESSTRON—Electric Service Systems Inc
ESTANE—Goodrich (B F) Chemical Co
Esterline-Angus Co—see Esterline-Angus Instrument Co
Esterine-Angus Instrument Co P O Box 596 Indianapolis 6 Ind
Esty Mfg Co 112 S Sangamon St Chicago 7 Ill
ETTCO-FLEX—Ettco Wire & Cable Corp
ETTCO-PLASTIC—Ettco Wire & Cable Corp
Ettco Wire & Cable Corp 75 Onderdonk Ave Brooklyn 37 NY
Euclid Electric & Mfg Co 50 Edwards St Madison Ohio
EUREKA—Morse (Frank W) Co
EVANOHM—Driver (Wilbur B) Co
EVER-LOK—Russell & Stoll Co Inc
EVEREADY—National Carbon Co
Everett (E A) Inc—see Railroad Accessories Corp
Everglow Lighting Fixture Co Inc 332 E Jericho Turnpike Huntington Station NY
EVERGREEN—Snyder (M L) & Son Inc
EVERLITE—Curtis Development & Mfg Co
Everwarm Inc 3600 Pleasant Ridge Rd Knoxville Tenn
Ewald Instruments Box 124P Kent Conn
Excel Electric Service Co Inc 2113 S Western Ave Chicago 8 Ill
Excel Fuse Co 117 W Erie St Pittsburgh 12 Pa
EXECUTIVE—Linemaster Switch Corp
Executone Inc 415 Lexington Ave NY 17 NY
EXEL—Superior Electric Co
EXFLEX—Lewis Engineering Co
Exmet Corp 127 Marbledale Rd (P O Box 485) Tuckahoe NY
Exide Industrial Div Electric Storage Battery Co Rising Sun & Adams Ave (P O Box 5723) Philadelphia 20 Pa
EXOLVE—Penetone Co
EXPANDER—Arro Expansion Bolt Co
EXPLOSIMETER—Mine Safety Appliances Co
EXTERN-O-FUSE—R T & E Corp
EXTRAFLEX—Universal Metal Hose Co
EXTRUDO-LITE—Magni Flood Inc
EYE COMFORT—Curtis Lighting Div
EYE-EASY—Manning (RA) Co Inc
EYE SAVING—Westinghouse Electric Corp Lamp Div
Eynon-Dakin Co 9900 Freeland Ave Detroit 27 Mich
EZY-TEAR—Anderson Electric Corp

F

FA—Adam (Frank) Electric Co
F & F—Trent Inc
F P—Mallory (P R) & Co Inc
FSP—Square D Co
F W D Corp 105 E 12 St Clintonville Wis
Fairbanks Co 393 Lafayette St NY 3 NY
Fairbanks Morse & Co Electrical Div 303 N Henderson Freeport Ill
FAIRLEADER—Barry (William B) Co
FAIRWAY—Day-Brite Lighting Inc
FALCON—Guth (Edwin F) Co
Falcon Equipment Co 13th St (Box E-255) New Brighton Pa
Falk Corp Box 492 Milwaukee 1 Wis
Falstrom Co 62 Falstrom Court Passaic NJ
FAMOUS—Goshen Churn & Ladder Inc
FAN-GLO HEETAIRE—Markel Electric Products Inc
FAN-PAC—DeBothezat Fans Div American Machine & Metal Co
FAN-PAC—General Blower Co
FANFARE—Fanon Electronic Industries Inc
Fanner Mfg Co Electrical Products Div Brookside Park Cleveland 9 Ohio
FANNGRIPS—Fanner Mfg Co Electrical Products Div
Fannon (John J) Co—see Fannon (John J) Products Co
Fannon (John J) Products Co 3000 E Woodbridge Detroit 7 Mich
FANNSPLICES—Fanner Mfg Co Electrical Products Div
Fanon Electric Co Inc—see Fanon Electronic Industries Inc
Fanon Electronic Industries Inc 439 Frelinghuysen Ave Newark NJ
Fanon Electronic Sales Corp—see Fanon Electronic Industries Inc
FANON-FONE—Fanon Electronic Industries Inc
Faraday Inc 2011 W Beecher Rd Adrian Mich
FARADOID—Westinghouse Electric Corp
FARCO—Farrelloy Co
Fargo Mfg Co Inc 845 Main St Poughkeepsie NY
Faries Lamp Div—see AOW Corp
Faries Mfg Corp—see AOW Corp
Farmer Electric Co—see Farmer Electric Products Co Inc
Farmer Electric Products Co Inc 2300 Washington St Newton Lower Falls 62 Mass
FARMOTOR—Westinghouse Electric Corp
FARMSTARTER—Westinghouse Electric Corp
Farrelloy Co 1245 N 26th St Phila 21 Pa
FAS-TIN—Farrelloy Co
Fasco Industries Inc Davis & Toppin Sts Rochester 2 NY
Fasform Div Heller Roberts Mfg Corp 6115 Carnegie Ave Cleveland 1 Ohio
FASHION—White-Rodgers Co
FASHION PLATE—Bryant Electric Co
Fast-Lok Mfg Co Ash St at Bedford Bridgeport 5 Conn
FASTHOLD—Mitchell Rand Insulation Co
Fastway Fasteners Inc 1676 E 28 St Lorain Ohio
FATHOMETER—Raytheon Mfg Co
FAULTFINDER—Parr Mfg Corp
FAULTMASTER—Hubbard & Co
FEATHERLITE—Century Lighting Inc
FEATHERTOUCH—Theiler (H J) Corp
FEATHERWEIGHT—Goldak Co Inc
FEATHERWEIGHT—Wing (L J) Mfg Co
Fedders Corp 58-01 Grand Ave Maspeth NY
Fedders-Quigan Corp—see Fedders Corp
FEDERAL—Dillin (Frank W) Corp
Federal Electric Co Inc—see Federal Sign & Signal Corp
Federal Electric Products Co—see Federal Pacific Electric Co
Federal Enterprises—see Federal Sign & Signal Corp
Federal Lighting Corp 1425 Rockwell Ave Cleveland 14 Ohio
Federal Lighting Div—see Federal Lighting Corp
Federal Machine & Welder Co 1745 Overland Ave N E Warren Ohio
Federal Pacific Electric Co 50 Paris St Newark 5 NJ
Federal Shock Mount Corp 1060 Washington Ave New York 56 NY
Federal Sign & Signal Corp 13626 S Western Ave Blue Island Ill
Federal Telephone and Radio Co—see ITT Components Div
Federated Metals Div American Smelting & Refining Co 120 Broadway New York 5 NY
FEED-IN—Square D Co
Feedrail Corp 125 Barclay St New York 7 NY
FEEDUCT—Columbia Metal Box Co
Feiler Engineering & Mfg Co 8026 N Monticello Ave Skokie Ill
Felco Products Inc 8700 Ambassador Row Dallas 19 Tex
FEMCO—Fluorescent Equipment & Mfg Co
FENCE-RITE—Electric Service Systems Inc
Fenwal Inc Pleasant St Ashland Mass
FERALOY—Crouse-Hinds Co
FERMONT—International Fermont Machinery Co Inc
Ferrara Inc—see Webster Electric Co
FERRIMAG—Crucible Steel Co of America
FERRUBRON—Carbolineum Wood Preserving Co
Fiber Conduit Co—see Orangeburg Mfg Co
FIBREMAT—Minnesota Mining & Mfg Co Irvington Div
FIBROID—Johns-Manville
FIBRPLUG—Star Expansion
Fidelity Chemical Products Corp 470 Frelinghuysen Ave Newark 12 NJ
Fidelity Electric Co Inc 332 N Arch St Lancaster Pa
FIEFLEX—Insulation Mfrs Corp
FILTAIRETTE—General Scientific Equipment Co
Finland House Lighting—see Litecraft Mfg Corp
FINROD—Tuttle & Kift Inc
Fire Alarm Thermostat Corp 53 W 23 St New York 10 NY
Fire Detective Inc 300 Chancellor Ave Newark 12 NJ
FIRE FUSE—Wind-Way Fan & Ventilator Co
FIREBAN—Taylor Fibre Co
FIREFLY—Northern Light Co
FIREYE—Electronics Corp Of America
FIRMA—Hirschman-Pohle Co Inc
First Lamp Corp—see Penetray Corp
Fischer & Porter Co 335 Warminster Rd Hatboro Pa
Fisher Berkeley Corp 4224 Holden St Emeryville Calif
Fisher-Pierce Co 170 Pearl St South Braintree 85 Mass
Fisher Research Laboratory Inc 1961 University Ave Palo Alto Calif
5-WAY—Superior Electric Co
FIXTURE FASHIONS—Moe Light Div Thomas Industries Inc
FLAME STOP—Phelps Dodge Copper Products Corp
FLAMENOL—General Electric Co
FLAMESCENT—Duro-Test Corp
FLASH—Phillips Mfg Co Inc
FLASH-GLO—Tedcar Products Co
FLASHMASTER—Carpenter Mfg Co
FLAVOR SEAL—Fresh'nd-Aire Div Cory Corp
Fleron (M M) & Son 1220 Yardley Rd Morrisville Pa
Fletcher Mfg Co Box 246 Englewood Ohio
Fleur-O-Lier Mfrs 2116 Keith Bldg Cleveland 15 Ohio
FLEX-A-PLUG—General Electric Co
FLEX-A-POWER—General Electric Co
FLEX-ARC—Westinghouse Electric Corp
FLEX-ARM—Woodward Machine Co
FLEX-FIT—Charleston Rubber Co
FLEX HERMETIC—Fedders Corp
FLEX-LITE—Aero-Motive Mfg Co

FLEX-LOCK—Keystone Electric Mfg Co
FLEX-SAF—Charleston Rubber Co
FLEX-SEAL—Columbia Cable & Electric Corp
FLEX-SHEAR—Marvel Rack Mfg Co Inc
FLEXACON—Hatfield Wire & Cable Div Continental Copper & Steel Industries Inc
FLEXALARM—Gamewell Co
FLEXALL—Rome Cable Div of Alcoa
FlexAngle Corp 3760 Oakwood Ave (P O Box 418) Youngstown 1 Ohio
FLEXARAY—Duro-Test Corp
FLEXARM—Art Specialty Co
FLEXARM—Flexo International Corp
FLEXCHRON—Standard Electric Time Co
FLEXFOAM—Columbia Wire & Supply Co
FLEXI-SWITCH—Nankervis (Geo L) Co
FLEXIFONE—DuKane Corp
FLEXIFORMER—Superior Electric Co
FLEXILUGS—Frankel Connector Co
FLEXITE—Markel (L Frank) & Sons
FLEXITORQ—Allis (Louis) Co
FLEXLAB—Standard Electric Time Co
FLEXLEAD—Markel (L Frank) & Sons
FLEXLIFE—Columbia Wire & Supply Co
FLEXO—Art Specialty Co
Flexo International Corp 3720 N Milwaukee Ave Chicago 41 Ill
FLEXO MIKESTERS—Art Specialty Co
FLEXOLON—Tensolite Insulated Wire Co Inc
FLEXON—Flexonics Corp
Flexonics Corp 1430 S Third Ave Maywood Ill
FLEXSEAL—Columbia Cable & Electric Corp
FLEXSHIELD—American Electric Cable Co
FLEXSTEEL—National Electric Div H K Porter Co
FLEXSTEEL—Utilities Service Co
FLEXTUNG—Capewell Mfg Co
FLICKER-FLAME—Aerolux Lights Corp
FLIP-SEAL—Rodale Mfg Co Inc
FLIP-TITE—Royal Electric Corp
FLIPON—Westinghouse Electric Corp
FLITE-CHEK—Ramset Fastening System
FLO-LINER—Wheeler Reflector Co
FLO-RITE—Burton Mfg Co
FLO-SIG—New Jersey Meter Co Inc
FLOATING PANEL—Metalcraft Products Co Inc
FLOOR MASTER—Lewis-Shepard Products Inc
FLORAFLOOD—Steber Div Pyle-National Co
FLORALAMP—Steber Div Pyle-National Co
FLORALITE—Steber Div Pyle-National Co
FLORDUCT—National Electric Div H K Porter Co
FLOW-COLD—Acme Industries Inc
FLOW-MIZER—Acme Industries Inc
FLOW-PAC—Acme Industries Inc
FLOW-TEMP—Acme Industries Inc
FLOW-THERM—Acme Industries Inc
Flower (D B) Mfg Co 1217 Spring Garden St Philadelphia 23 Pa
Flower Mfg Co Inc—see Flower (D B) Mfg Co
FLOWER LIGHT—Aerolux Lights Corp
FLOWRATOR—Fischer & Porter Co
FLUD-LITE—Stanley Power Tools Div
FLUID SHAFT—Reuland Electric Co
FLUO-LITER—Guth (Edwin F) Co
FLUOMERIC—Duro-Test Corp
FLUOR-DE-LE—Segil (L J) Co
FLUORSINT—Polymer Corp
FLUOR-O-TESTER—Electric Re-Light Co
Fluores-O-Light Co Evans Terminal North Broad St Hillside 5 NJ
Fluorescent Equipment & Mfg Co 5105 Cowan Ave Cleveland 27 Ohio
Fluorescent Equipment Supply Co—see K-B Lighting Mfg Co
Fluorescent Fixtures of California 352 Shaw Rd South San Francisco Calif
FLUORESIGN—Reserve Electric Mfg Co
FLUOROLITE—K-B Lighting Mfg Co
FLUR-O-LAMP—Laduby Co Inc
FLUOR-O-LOCKS—Laduby Co Inc
FLUR-O-LUX—Fullerton Mfg Co
FLURO-SPRAY—Duro-Test Corp
FLUSH CALL—Edwards Co Inc
FLUSHDUCT—National Electric Div H K Porter Co
FLUSHLITES—Drake Mfg Co
FLUX-N-SOLDER—Johnson Mfg Co Inc
FLYING FARMER—Line Material Industries
FOAMFLEX—Phelps Dodge Copper Products Corp
FOAMLINE—Plastoid Corp
FOAMTUBE—Plastoid Corp
FOCALITE—Amplex Corp
FOCUS BEAM—Westinghouse Electric Corp Lamp Div
FOLD-A-WAY—Patent Scaffolding Co Inc
Folsom Co Inc 3104 Oak Lane Dallas 26 Tex
FOOTROL—General Control Co
FORCE-FLO—Trane Co
FORLAMP—General Electric Co
FORMBOND—Belden Mfg Co
FORMEX—General Electric Co
FORMEZE—General Cable Corp
FORMLON—General Cable Corp
FORMVAR—Anaconda Wire & Cable Co
Forsberg Mfg Co 125 Seaview Ave Bridgeport 1 Conn
Forston Co 2117-2119 Judiway (P O Box 10231) Houston 18 Tex
Fort Worth Steel & Machinery Co 3600 McCart St (PO Box 1038) Fort Worth 1 Tex
FORTY-SIXTY—Curtis Lighting Div
FORWAY—U S Expansion Bolt Co
FOSTERITE—Westinghouse Electric Corp
Fostoria Corp N Main St Fostoria Ohio
Fostoria Pressed Steel Corp—see Fostoria Corp
FOTA-LITE—Corning Glass Works
4 POINT—Nye Tool Co
FOUR-STAR—Johns-Manville
Four Wheel Drive Auto Co—see F W D Corp
Fox Gun Co—see Fox Products Co
Fox Products Co 4720 N 18 St Phila 41 Pa
FRAHM—Biddle (James G) Co
FRAME GATE—Gar Wood Industries Inc
France Mfg Co 10325 Berea Rd Cleveland 2 Ohio
FRANCEFORMER—France Mfg Co
Francolite Co—see Federal Lighting Corp
Frankel Connector Co 27 Vestry St NY 13 NY
Franklin Electric Co Inc 400 E Spring St Bluffton Ind
Fresh'nd Aire Co—see Fresh'nd-Aire Div Cory Corp
Fresh'nd-Aire Div Cory Corp 221 N LaSalle St Chicago Ill
Frick Co Waynesboro Pa
Frick-Gallagher Mfg Co 110 S Michigan Ave Wellston Ohio
FRIGI-START—Duro-Test Corp
Frigid Inc 1250 Rockaway Ave Brooklyn 36 NY
Frigidaire Div General Motors Corp 300 Taylor St Dayton 1 Ohio
FRIGIDFLEX—Hatfield Wire & Cable Div Continental Copper & Steel Industries Inc
Frink Corp 211 63rd St Brooklyn 20 NY
Frisbie (HC) Co 1120 E Pico Blvd Los Angeles 21 Calif
FROG-LEG—Allis-Chalmers Mfg Co
FULL-O-LITE—Fullerton Mfg Co
FULL-O-PEP—Standard Electric Co Inc
Fullerton Mfg Co Willard Rd Norwalk Conn
Fullman Mfg Co 1209-1215 Jefferson St Latrobe Pa
Fulton Sylphon Div Robertshaw-Fulton Controls Co Box 400 Knoxville 1 Tenn
Furnas Electric Co 1067 McKee St Batavia Ill
FUSEKING—Monarch Electric Div El-Tronics Inc
FUSETRON—Bussmann Mfg Div McGraw-Edison Co
FUSISTOR—S & C Electric Co
FUSTAT—Bussmann Mfg Div McGraw-Edison Co
FUTURA—Metalcraft Products Co Inc
FUTURLITER—Guth (Edwin F) Co
FYBEROID—Wilmington Fibre Specialty Co
FYR-CRY—Fyr-Fyter Co Engineered Systems Div
Fyr-Fyter Co Engineered Systems Div P O Box 66 Edison NJ
FYRINDEX—Kidde Ultrasonic & Detection Alarms Div

G

GAC—General Alliance Corp
G-C Electronics Co 400 S Wyman St Rockford Ill
GE—General Electric Co
G-H—Girard Hopkins
GL—Lidseen of North Carolina Inc
GM Diesel 13400 W Outer Dr Detroit 28 Mich
GS—General Scientific Equipment Co
GSF—General Steel Fittings Co
GST—Guth (Edwin F) Co
G & W Electric Specialty Co 3500 W 127 St Blue Island Ill
G/W—Interlectric Div El-Tronics Inc
Gaffers & Sattler—see Mission Appliance Corp
Gaines Collins Co—see Collins Machinery Corp
GALV-KROM—Steel City Electric Co
GALVAKOTE—Mark (Clayton) & Co
Galvin Mfg Co—see Motorola Communications & Electronics Inc
GALVINOLEUM—Rust-Oleum Corp
GALVITE—Republic Steel Co
Gamewell Co Newton Upper Falls 64 Mass
GAR-LITE—Garcy Lighting Div Garden City Plating & Mfg Co
GAR-SEE-LITE—Garcy Lighting Div Garden City Plating & Mfg Co
Gar Wood Industries Inc Wayne Mich
GARAGE-LITE—Woodward Machine Co
Garcy Lighting Div Garden City Plating & Mfg Co 2475 Elston Ave Chicago 47 Ill
Garden City Fan Co—see Garden City Fan & Blower Co
Garden City Fan & Blower Co 801 N Eighth St Niles Mich
Garden City Plating & Mfg Co—see Garcy Lighting Div
GARDINER—Federated Metals Div American Smelting & Refining Co
Gardner Bender Co 5448 N 24 Pl Milwaukee 9 Wis
Gardner Electric Mfg Co—see Federal Pacific Electric Co
Gardner Products Co Div Detroit Industrial Products Co 15244 Aubrey Detroit 39 Mich
Gaston Power Tools 999 Ridge Rd Thornton Ill
Gates Electronic Co 2090 Barnes Ave Bronx 62 NY
Gateway Engineering Co 3233 W Grand Ave Chicago 51 Ill
GATEWAYDUCT—Gateway Engineering Co
GAUGETROL—Automatic Control Co
GAYETY—Westinghouse Electric Corp Lamp Div
GEAR-O-MATIC—Franklin Electric Co Inc
GEAREDUCERS—Electra Motors Inc
Gedney Electric Co Americas Bldg Radio City NY 20 NY
GEM—Mallory (PR) & Co Inc
GEM DANDY—Buckels (Chris) Inc
Gem Electric Mfg Co Inc 237 37th St Brooklyn NY
Gemco Electric Co 25685 W Eight Mile Rd Detroit 40 Mich
GEN-AIR—United States Motors Corp
GEN-PRO—General Products Corp
GENCATHENE—General Cable Corp
GENCATROL—General Cable Corp
GENEMOTOR—Carter Motor Co
General Alliance Corp 2105 Moore St San Diego Calif
General Battery and Ceramic Corp Box 1262 Reading Pa
General Blower Co 8610 Ferris Ave Morton Grove Ill
General Cable Corp 730 Third Ave New York 17 NY
General Cable Corp Clifton Conduit Div—see Clifton Conduit Co
General Cement Mfg Co—see G-C Electronics Co Div of Textron Electronics Inc
General Control Co 1200 Soldiers Field Rd Boston 34 Mass
General Controls Co 801 Allen Ave Glendale Calif
General Electric Co
Air Conditioning Dept Central Air Conditioner Troup Highway Tyler Tex
Apparatus Sales Schenectady 5 NY
Chemical & Metallurgical Div Conduit Products Dept 980 Warren Ave Niles Ohio
Circuit Protective Devices Dept 41 Woodford Ave Plainville Conn
Commercial & Industrial Air Conditioning Dept 5 Lawrence St Bloomfield NJ
Distribution Assemblies Dept 41 Woodford Ave Plainville Conn
Laminated Products Dept Coshocton Ohio
Large Lamp Dept Nela Park Cleveland Ohio
Major Appliance Div Room Air Conditioner Dept Appliance Park Louisville 1 Ky
Miniature Lamp Dept Nela Park Cleveland Ohio
Silicone Products Dept Waterford NY
Technical Products Dept Electronics Park Syracuse NY
Weathertron Dept 5 Lawrence St Bloomfield NJ
Wire & Cable Dept 1285 Boston Ave Bridgeport 2 Conn
Wiring Device Dept 95 Hathaway St Providence RI
General Electric Supply Co 1260 Boston Ave Bridgeport Conn
General Floorcraft Inc 3630 Rombouts Ave Bronx 66 NY
General Hardware Mfg Co Inc 80 White St NY 13 NY
General Insulated Wire Works 69 Gordon Ave Providence 5 RI
General Lamps Mfg Corp—see AOW Corp
General Lighting Co 248 McKibbin St Brooklyn 6 NY
General Luminescent Corp—see Pollak Luminescent Corp
General Metals Inc 858 Goldsbro Greensboro NC
General Products Corp 107 Salem St Union Springs NY
General Radio Co West Concord Mass
General Scientific Equipment Co Limeklin Pike & Williams Ave Philadelphia 50 Pa
General Steel Fittings Co 1321 21st St Racine Wisconsin
General Switch Co 45 Roebling St Brooklyn 11 New York
General Ultrasonics Co—see Acoustics Associates Inc
GENERALFLOOD—Appleton Electric Co
GENERALITER—Duro-Test Corp
GENESCOPE—Simpson Electric Co
GENIE—Alliance Mfg Co Inc
GEON—Goodrich (B F) Chemical Co
Geophysical Instrument Co—see Georator Corp
GEOPRENE—General Electric Co Wire & Cable Dept
Georator Corp Manassas Va
GEORGE—Clark (George P) Div Cragin & Wilkins Co Inc
Geringer & Sons Mfg Corp Peekskill NY
GESCO—General Electric Supply Co
Gets-A-Lite Co 3865 N Milwaukee Ave Chicago 41 Ill
GIANT—Burgess Battery Co
Gibbons Metal Products 730 Gibbons St Los Angeles 31 Calif
Gibson Mfg Co 1919 Piedmont Circle N E Atlanta Ga
Gibson Refrigerator Co 515-615 W William St Greenville Mich
GILL—Progress Mfg Co Inc
Gill Glass & Fixture Co Philadelphia 34 Pa
GILL-GLO—Gill Glass and Fixture Co
Girard-Hopkins 1000 40th Ave Oakland 1 Calif
Gisholt Machine Co 1245 E Washington Ave Madison 10 Wis
GISHOLT MASTERLINE—Gisholt Machine Co
Glade Mfg Co 1632 W 75 Pl Chicago 20 Ill
GLAS-VAR—Electro-Technical Products Div
GLASBAKE—McKee Div Thatcher Glass Mfg Co Inc
GLASPUN—Atlas Asbestos Co
GLASSEAL—Pyramid Electric Co
GLASSHEAT—Continental Radiant Glass Heating Corp
GLASSURFACED—Kirlin Co
GLASTERRA—Chase & Sons Inc
Glastic Corp 4321 Glenridge Rd Cleveland 21 Ohio
GLAZON—Triangle Conduit & Cable Co Inc
Gleason-Avery Inc 45 Aurelius Ave Auburn NY
Gleason (J L) & Co—see Gleason Reel Corp
Gleason Reel Corp 740 N Plankinton Ave Milwaukee 3 Wis
Gleason Sales Co Inc 5809 W Montrose Ave Chicago 34 Ill
Glen Co—see M & T Welding Products Corp
Glen Equipment Co—see M & T Welding Products Corp
Glen Roberts Co—see M & T Welding Products Corp
GLENDALE—King Refrigerator Corp
Glenn Electric Heater Corp 374 Jellf Ave Newark NJ
GLIDE-A-LITE—Globe Lighting Products Inc
GLO GUARD—Hubbard & Co
Glo-Lite Instrument Co 152 Watson Ave Newark 12 NJ
GLO-PAINT—Vemaline Products Co
GLO PLUG—Industrial Devices Inc
GLO-RAY—Curtis Lighting Div Curtis-All Brite
GLO-RITE—Phillips (Oscar) Co
Globar Plant (Refractories Div) Carborundum Co Niagara Falls NY

Globe Industries Inc 1784 Stanley Ave Dayton 4 Ohio
Globe Lighting Products Inc 1710 Flushing Ave Brooklyn 37 NY
GLOMASTER—Emerson-Pryne Co
GLOW LITE—Spencer Industries
GLOWLITE—Larco Inc
GLYPTAL—General Electric Co
GO-GETTER—Revolvator Co
Godfrey Mfg Co 1633 N Halsted St Chicago 14 Ill
Goetz (J F) Mfg Co 162 South St Hartford Wis
GOLD—Kaiser Aluminum & Chemical Sales Inc
GOLD CROWN—Pioneer Gen-E-Motor Co
GOLD MEDAL—Patent Scaffolding Co Inc
GOLD-O-MATIC—Luxor Lighting Products Inc
Goldak Co Inc 1544 W Glenoaks Blvd Glendale 1 Calif
Goldberg & O'Brien Electric Co—see Ther Electric & Machine Works
GOLDEN-D—Cannon Electric Co
GOLDEN SUNBURST—Globe Lighting Products Inc
GOLIATH—David's Gloves Inc
Good-All Electric Mfg Co 112 W First St Ogallala Neb
Good Mfg Co Inc 1015 N Halsted St Chicago 22 Ill
Goodall Rubber Co 493 Whitehead Rd Trenton NJ
Goodrich (BF) Chemical Co 3135 Euclid Ave Cleveland 15 Ohio
GOPI—Bronze Bearings Inc
Goshen Churn & Ladder Inc Goshen Indiana
Gould-National Batteries Inc Trenton 7 NJ
GOVOHM—Electric Regulator Corp
Graham (Phillip E) Co Inc—see Industrial Electric Switches of Indiana
Graham Mfg Corp 152 Second Ave Needham Hts 94 Mass
GRAIN-ORIENTED—Vickers Inc
GRAMIX—United States Graphite Co
GRATELITE—Guth (Edwin F) Co
Gray Instrument Co Mill Rd Andalusia Pa
Graybar Electric Co Inc 420 Lexington Ave NY 17 NY
Grayhill Inc 551 Hillgrove Ave La Grange Ill
GREA-NO—Great Northern Mfg Corp
Great Northern Mfg Corp 1056 N Wood St Chicago 22 Ill
Great Western Div—see Interlectric Div El-Tronics Inc
Green Ball Bearing Co 9518 Cassius Ave Cleveland 5 Ohio
GREEN GUARD—Security Mfg & Contracting Co
Greene (R H) Inc 1201 24th St Oakland 7 Calif
Greenlee Tool Co 2136 Twelfth St Rockford Ill
Greibach Instruments Corp 315 North Ave New Rochelle NY
GRENADIER—Wakefield Lighting Div
Grieve-Hendry Co Inc 1350 N Elston Ave Chicago 22 Ill
Grinnell Co Inc 260 W Exchange St Providence 2 RI
GRIP-FLEX—Copperweld Steel Co Wire & Cable Div
GRIP KLIP—Excel Fuse Co
GRIP-KLIPS—Specialties Inc
Grip-Tite Mfg Co 115 W Jefferson St Winterset Iowa
GRIP-TYPE—Thiel Tool & Engineering Co
GRIPEZE—Phelps Dodge Copper Products Corp
GRIPMASTER—Champion DeArment Tool Co
GRIPO—Barrett Varnish Co
GRIPZIN—Star Expansion
GRIZZLY—Kaiser Aluminum & Chemical Sales Inc
GRIZZLY—Pucel Enterprises Inc
GRO-QUICK—Wrap-On Co
GROUND-OHMER—Sticht (Herman H) Co Inc
GROUNDOMETER—Borden Engineering Div M J Johnson Aircraft Engineering Co
GROUNDULET—Crouse-Hinds Co
Gruber Bros Inc 125 South First St Brooklyn 11 NY
Gruber Lighting—see Gruber Bros Inc
GRYPHON—Brook Motor Corp
GUARANTEE—Partrick & Wilkins Co
Guaranteed Products Inc—see Shox-Stok Inc
GUARDIAN—Dura Electric Lamp Co Inc
GUARDIAN—General Cable Corp
Guardian Electric Mfg Co 1550 W Carroll Ave Chicago 7 Ill
Guardian Light Co 500 N Blvd Oak Park Ill
GUARSDMAN—West Instrument Corp
Guggemos (K) Co—see Kenworth Co
GUIDE-LINED—Republic Steel Corp
GUIDE RAY—Everwarm Inc
GUILLOTINE—Wachs (EH) Co
GULF STREAM—Signal Electric Div King-Seeley Corp
Gulton Industries Inc Alkaline Battery Div Metuchen NJ
GUSCO—Gustaveson Inc
Gustaveson Inc 8600 Chestnut St Kansas City 32 Mo
Guth (Edwin F) Co 2615 Washington Blvd St Louis 3 Mo
GUTHLITE—Guth (Edwin F) Co
GUY GRIP—Preformed Line Products Co
Guyan Machinery Co Inc Box 150 Logan W Va
Gwilliam Co 348 Furman St Brooklyn 1 NY
GYMLITE—Steber Div Pyle-National Co
GYRO-LITE—Swivelier Co Inc
GYROL—American-Standard

H

H-B Instrument Co American & Bristol Sts Philadelphia 40 Pa
H & H—Arrow-Hart & Hegeman Electric Co
H-P—Hatheway & Patterson Co Inc
HABIR BUS—Phelps Dodge Copper Products Corp
HABIRDRY—Phelps Dodge Copper Products Corp
HABIRSHAW—Phelps Dodge Copper Products Corp
Hadco Aluminum Products Co P O Box 128 Littlestown Pa
Haertel (Walter) Co 2840 4th Ave So Minneapolis Minn
Haft & Sons Inc 950 Kent Ave Brooklyn 5 NY
HAFTSON—Haft & Sons Inc
HAIRPINLINE—Illuminating Engineering Co
Halex Die Casting Co 8640 Bessemer Cleveland 27 Ohio
Haley Electronics Co 57 William Street New York 5 New York
Haley (R G) & Co Inc 767 Spitzer Bldg Toledo 4 Ohio
Haley (R G) International Corp Inc—see Haley (R G) & Co Inc
HALIDE—Turner Brass Works
Hall (William) Co Canal Bank Windsor Locks Conn
HAM-R-TOOL—Fastway Fasteners Inc
Hamilton Caster & Mfg Co 1519 Dixie Highway Hamilton Ohio
Hamilton Fan & Blower Co 2644 Colerain Ave Cincinnati 14 Ohio
Hammarlund Mfg Co Inc 460 W 34 St NY 1 NY
HAMMER-HEAD—Perfeclite Co
HAMMER-LOCK—Perfeclite Co
HAMMERKORE—Tilden Tool Mfg Co Inc
HAMMETER—Simpson Electric Co
HAMRFLUTE—Star Expansion
HAMRTWIST—Star Expansion
HAMSWITCH—Mallory (P R) & Co Inc
Han-Kor Inc 9520 Richmond Ave Cleveland 5 Ohio
HAND-I-PHONE—Murdock Corp
HANDI-HEET—Smith Welding Equipment Corp
HANDI-SPOOL—Tevco Insulated Wire
HANDI-UNIT—Bernard-Franklin Co Inc
HANDI-TALKIE—Motorola Communications & Electronics Inc
Handling Devices Co Inc 34 Concord Lane Cambridge 38 Mass
Handy Angle Div Lug-All Co 355 Lancaster Ave Haverford Pa
HANDY CRAFT—Westinghouse Electric Corp
HANG-RITE—U S Expansion Bolt Co
HANK'S—Klein (Mathias) & Sons
Hankscraft Co Control Div—See Acro Switch Div Robertshaw-Fulton Controls Co
Hanovia Lamp Div Engelhard Industries Inc 100 Chestnut St Newark 5 NJ
Hansen Mfg Co Inc RR #1 Princeton Ind
HAP-E-LITE—Alkco Mfg Co
HAPCO—Hubbard & Co
HARBOT—Unimatic Corp
HARD-TUNG—Capewell Mfg Co
Harder (Donald C) Co 2580 K St San Diego 2 Calif
Hardman (H V) Co Inc 571 Cortlandt St Belleville 9 NJ
HARDSET—Hardman (H V) Co Inc
HARDY TOOLS—Interstate Drop Forge Co Special Products Div
Harnischfeger Corp 4400 W National Ave Milwaukee 46 Wis
Harold Electric Co 210 E Alder St Walla Walla Wash
Harper Electric Furnace Corp 39 River St Buffalo 2 NY
Hart & Hegeman—see Arrow-Hart & Hegeman Electric Co
HART-LOCK—Arrow-Hart & Hegeman Electric Co
Hart Mfg Co 164 Bartholomew Ave Hartford Conn
Hartford Blower Co—see Sterling Blower Co
Hartzell Propeller Fan Co S Englert Ave Piqua Ohio
HARTZITE—Hartzell Propeller Fan Co
HARVEL—Minnesota Mining & Mfg Co Irvington Div
HASCO—National Band & Tag Co
Hasco Electric Corp 30 Grove Ave New Rochelle NY
Hastings Air Conditioning Co Inc 108 S Colorado Ave Hastings Neb
HATCORONE—Hatfield Wire & Cable Div Continental Copper & Steel Industries Inc
HATEMP—Hatfield Wire & Cable Div Continental Copper & Steel Industries Inc.
HATEX—Hatfield Wire & Cable Div Continental Copper & Steel Industries Inc
Hatfield Wire & Cable Div Continental Copper & Steel Industries Inc 487 Hillside Ave Hillside 5 NJ
HATFLEX—Hatfield Wire & Cable Div Continental Copper & Steel Industries Inc
Hatheway & Patterson Co Inc 156 County St Mansfield Mass
HATROL—Hatfield Wire & Cable Div Continental Copper & Steel Industries Inc
HATSEAL—Hatfield Wire & Cable Div Continental Copper & Steel Industries Inc.
HATVINOL—Hatfield Wire & Cable Div Continental Copper & Steel Industries Inc
HAVEN'S—Klein (Mathias) & Sons
Hayden Twist Drill Co Manila Ark
Haydon (A W) Co 4060 Ince Blvd Culver City Calif
Haydon (A W) Co 232 N Elm St Waterbury Conn
Haydon Div General Time Corp 245 E Elm St Torrington Conn
Hayes (C T) Inc 800 Wellington Ave Cranston 10 RI
HAYMOLITE—Steber Div Pyle-National Co
Hays Mfg Co Automatic Controls Div 12th and Liberty Sts Erie 6 Pa
Hazard Insulated Wire Works—see Okonite Co
HAZARDCHECK—Westline Products Div Western Lithograph Co
HAZARDSTRIPE—Westline Products Div Western Lithograph Co
HEADERDUCT—Walker Brothers
Healy-Ruff Co Water Level Controls Div 2255 University Ave St Paul 14 Minn
HEAT-A-LITE—Nutone Inc
HEAT KILLERS—Coppus Engineering Corp
Heat-Timer Corp 657 Broadway New York 12 NY
HEATAIRE—Markel Electric Products Inc
HEATMOBILE—Siebring Mfg Co
Heatmore Inc 651 Driggs Ave Brooklyn 11 NY
HEATSUM—Roberson Inc
HEATUBE—see McGraw-Edison Co Albion Div
Heatube Corp—see McGraw-Edison Co Albion Div
HEET-X—Hatfield Wire & Cable Div Continental Copper & Steel Industries Inc
Hein-Werner Corp 1200 National Ave Waukesha Wis
Heinemann Electric Co Pennsylvania Ave & Plum St Trenton 2 NJ
Heinze Electric Co 685 Lawrence St Lowell Mass
HELECON—United States Radium Corp
Heller Bros Co—see Heller Tool Co
Heller Industrial Fastener Div Heller Roberts Mfg Corp 6115 Carnegie Ave Cleveland 1 Ohio
Heller Tool Co Heller Drive Newcomerstown Ohio
Helwig Co—see Helwig Carbon Products Inc
Helwig Carbon Products Inc 2550 N 30 St Milwaukee 10 Wis
Helwig Mfg Co—see Interstate Drop Forge Co
HEMINGRAY—Kimble Glass Co
HEMISPHERE—Penetray Corp
Henderson Electric Co 25 Greenwood Ave East Orange NJ
Henderson-Hazel Corp 13601 Euclid Ave Cleveland 12 Ohio
Hendrix Wire & Cable Corp Milford NH
HERCULES—Duro-Test Corp
HERCULES—Linemaster Switch Corp
HERCULES—Whitman & Barnes Div United Drill & Tool Corp
HERCULON—Dossert Mfg Corp
Hertner Electric Co 12690 Elmwood Ave Cleveland 11 Ohio
HESS BRIGHT—SKF Industries Inc
Hesse Products Co 3800 N Virginia St Reno Nev
Hesse (W A) & Co—see Hesse Products Co
Hessel (W F) Co Inc 74 Beekman St NY 38 NY
Hetherington Inc—see Controls Co of America Control Switch Div
Hevi Duty Electric Co 3002 W Burleigh St (P O Box 563) Milwaukee 1 Wis
Hewitt-Robins 666 Glenbrook Rd Stamford Conn
Hewson (John) Co—see Hewson Co Inc
Hewson Co Inc 115 Maple St Summit NJ
HEX-A-LUME—Solux Corp
Hexacon Electric Co 161 W Clay Ave Roselle Park NJ
HEXCAST—U S Expansion Bolt Co
Hexcel Products Inc 2332 4th St Berkeley 10 Calif
HEXCLAD—Hexacon Electric Co
HEXSEAL—APM Corp
HEXTHODE—Luxor Lighting Products Inc
HEYCO—Heyman Mfg Co
Heyman Mfg Co Kenilworth 20 NJ
HI—Holub Industries Inc
HI-AMP—Lenco Inc
HI-BREAK—General Electric Co Apparatus Sales
HI-CAP—Bussmann Mfg Div McGraw-Edison Co
HI-CORE—Alpha Metals Inc
HI-EF—Kent Lighting Corp
HI-FLO—General Controls Co
HI-FLOOD—Radiant Lamp Corp
HI-FLUX—Annis (R B) Co
HI-HAT—Litecraft Mfg Co
HI-HEAT—Radiant Lamp Corp
HI-HOIST—Lantz Mfg Co Inc
HI-LAC—Ware Fuse Corp
HI LO—Industrial Devices Inc
HI-LO—Metalcraft Products Co Inc
HI-LO—Slater Electric & Mfg Co Inc
HI-LO-FLEX—AOW Corp
HI-MEG—Dolph (John C) Co
HI-OUTPUT—Westinghouse Electric Corp Lamp Div
HI-RANGER—Mobile Aerial Towers Inc
HI-REACH—Economy Engineering Co
HI-RED—Holub Industries Inc
Hi-Scale Products Corp 132 West 22nd Street New York 11 New York
HI-SPEED—Dockson Corp
HI-SPOT—Radiant Lamp Corp
HI-STRENGTH—Blackburn (Jasper) Corp
HI-SUPERTITE—Engelhard Industries Inc
HI TEMP—Rome Cable Div of Alcoa
HI-THERM—Dolph (John C) Co
HI-TORK—Electro-Mechanical Instrument Co
HI-TREADLITE—Linemaster Switch Corp
HI-TRONIC—Bliss Electronic Corp
HI-TWIST—Holub Industries Inc
HI-VOLT—Industrial Devices Inc
HIBOY—Holophane Co Inc
Hickok Electrical Instrument Co 10614 Dupont Ave Cleveland 8 Ohio
HICYCLE—Chicago Pneumatic Tool Co
Hiergesell Bros—see H-B Instrument Co
HIGH BAY—Curtis Lighting Div
HIGH EFFICIENCY—Westinghouse Electric Corp Lamp Div
HIGH SPEED—Capewell Mfg Co
Highway Trailer Co 405 E Fulton St Edgerton Wis
Hill (Walter P) Inc 22183 Telegraph Rd Detroit 19 Mich
Hill Transformer Co—see Delta-Star Electric Div H K Porter Co Inc
Hillsdale Commutator Co—see Toledo Commutator Co
HILO—Driver (Wilbur B) Co
Hilti Inc 73 Southfield Ave Stamford Conn
Hilti Rapid Fastening Systems—see Hilti Inc
Hindle Transformer Co Inc Woods Church Rd Flemington NJ
HINJON—Thomas & Betts Co
HIPOT—Peschel Electronics Inc
HIPPO—Mueller Electric Co

Hirschman-Pohle Co Inc 300 Lent Ave Le Roy NY
Hitemp Wires Co 1200 Shames Dr Westbury NY
HIWRAP—Hitemp Wires Co
HO—Phelps Dodge Copper Products Corp
Hobart Bros Hobart Square Troy 1 Ohio
Hoffman Engineering Corp 1050 Tyler St Anoka Minn
HOIST-ALL—Coffing Hoist Div Duff-Norton Co
HOL-DEM—Electric Service Systems Inc
Holan Corp 4100 W 150 St Cleveland 35 Ohio
Holcor Metal Fabricating & Finishing Corp—see House-O-Lite Corp
Hold-Dem Electric Fencer Co—see Electric Service Systems Inc
HOLD-IT—Arro Expansion Bolt Co
HOLD-IT—Madison Equipment Co
HOLD-TITE—Titchener (E H) & Co
HOLDA-LITE—Hoffman Engineering Corp
HOLDFAST—Ludlow Mfg & Sales Co
HOLDTITE—United States Rubber Co
HOLE-SHOOTER—Milwaukee Electric Tool Corp
HOLGUN—Black & Decker Mfg Co
HOLIDAY—Day-Brite Lighting Inc
Hollands Mfg Co—see Erie Tool Works
Hollingsworth (John R)—see Hollingsworth Co
Hollingsworth Co Solderless Terminal Div Box 430 Phoenixville Pa
HOLLOSHAFT—U S Electrical Motors Inc
Hollywood Number Co—see Electric House Number Co
HOLOFLUX—Holophane Co Inc
Holophane Co Inc 342 Madison Ave New York 17 NY
Holtzer-Cabot Div National Pneumatic Co Inc 125 Amory St Boston 19 Mass
Holtzer-Cabot Electric Co—see Holtzer-Cabot Div National Pneumatic Co Inc
Holub Industries Inc 442 Elm St Sycamore Ill
HOLZIN—Star Expansion
HOM-A-LARM—Castle Engineering Co
Homelite Corp—see Homelite Div Textron Inc
Homelite Div Textron Inc 67 Riverdale Ave Port Chester NY
Homer Commutator—see Toledo Commutator Co
HOMOCORD—Raybestos-Manhattan Inc
HOMOFLEX—Raybestos-Manhattan Inc
HONEYGLO—Hexcel Products Inc
HONEYLITE—Hexel Products Inc
Hopax Electric Inc 547 Greenwich St NY 13 NY
Hope Electrical Products Co Inc 27 Long Ave Hillside NJ
HORIZON—Benjamin Div (Thomas Industries Inc)
HORSE HEAD—New Jersey Zinc Co
Hose-McCann Corp—see Hose-McCann Telephone Co Inc
Hose-McCann Telephone Co Inc 25th St & 3rd Ave Brooklyn 32 NY
HOSPITAL-LITE—Swivelier Co Inc
HOSPITALITY LIGHT—Versen (Kurt) Co
Hossfeld Mfg Co 460 W Third St Winona Minn
HOT ROD—Pyrosil Inc
HOTKOTE—Mark (Clayton) & Co
HOTPACK—Electric Hotpack Co Inc
Hotpoint Co 5600 W Taylor St Chicago 44 Ill
HOTTAP—Burndy Corp
House-O-Lite Corp 2430 S Ashland Ave Chicago 8 Ill
HOW-ELL-DOR—Howell Mfg Co
Howard Electric Co 1950 Ruby St Melrose Park Ill
Howard Industries Inc 1760 State St Racine Wis
HOWARDUCT—Howard Electric Co
Howell Electric Motors Co 409 N Roosevelt Howell Mich
Howell Instrument Co—see Howell Instruments Inc
Howell Instruments Inc 3479 W Vickery Blvd Fort Worth 7 Tex
Howell Mfg Co 21 N Morehall Rd Paoli Pa
HOWE'S—Klein (Mathias) & Sons
Hoyt Electrical Instrument Works 42 Carleton St Cambridge 42 Mass
Hoyt Mfg Corp Forge Rd Westport Mass
Hoyt Southern Corp—see Hoyt Mfg Corp
Hub Electric Co 2255 W Grand Ave Chicago 12 Ill
HUB MOUNT—Hubbard & Co
Hubbard & Co 6301 Butler St Pittsburgh 1 Pa
Hubbard Spool Co—See American Pulley Co
Hubbell (Harvey) Inc State St & Bostwick Ave Bridgeport 2 Conn
HUBBELOCK—Hubbell (Harvey) Inc
HUBEYE—Hubbard & Co
HUBRAK—Hubbard & Co
Hudson Lamp Co 528 Elm St Kearny NJ
Huenefeld Co Engineered Products Div 2701 Spring Grove Ave Cincinnati 25 Ohio
Hughes Aircraft Co Vacuum Tube Products Div 2020 Short St Oceanside Calif
Hughes Bros Inc Seward Neb
Hughey & Phillips Inc 3200 N San Fernando Blvd Burbank Calif
Hullhorst Micro Tool Co—see Hullhorst Tools Inc
Hullhorst Tools Inc 227 Wamba Ave (P O Box 3344) Toledo 7 Ohio
HUMID-I-METER—Walton Laboratories Inc
HUMIDOLAN—Star Porcelain Co
HUMIDOMIST—Supreme Electric Products Co
HUMP DRIVE—Thiel Tool & Engineering Co
HUNTER—Ray-O-Vac Co
HUNTER—Waveland Electric Co
Hunter (H D) & Co—see Hunter Tools
Hunter Div Robbins & Myers Inc 2500 Frisco Ave Memphis 14 Tenn
Hunter Fan & Ventilating Co—see Hunter Div Robbins & Myers Inc
Hunter (R N) Sales Co—see Hunter Tools
Hunter Tools 9851 Alburtis St Santa Fe Springs Calif
HUNTSMAN—Kedman Co
Huntsman Welding Shield Co—see Kedman Co
Huppert (K H) Co 6830 S Cottage Grove Ave Chicago 37 Ill
HUSH-A-MATIC—Hays Mfg Co
HUSKY—Price Electric Corp
Husky Products Inc 5300 Vine St Cincinnati 17 Ohio
Hussey (CG) & Co 2850 Second Ave Pittsburgh 19 Pa
HY-A-SIL—Sanford Miller Co Inc
HY-CAP—Illinois Condenser Co
HY-ELECTRIC—Kritzer Products Div
HY-LITE—American Concrete Corp
HY-LITER—Guth (Edwin F) Co
HY-LOAD—Hyatt Bearings Div General Motors Corp
HY-RE-FLEC—Globe Lighting Products Inc
HY-SOL—Charleston Rubber Co
HY-TIN—Farrelloy Co
HY-V—DeBothezat Fans Div
Hyatt Bearings Div General Motors Corp Harrison NJ
HYCASTE—Premax Products Div
HYDENT—Burndy Corp
HYDRA-LIFT—Pitman Mfg Co
HYDRAGRIP—Armstrong-Bray & Co
HYDRAKOTE—Hatfield Wire & Cable Div
HYDRALLOY—Okun (A L) Co Inc
HYDRANOID—General Control Co
HYDRATEMP—Hatfield Wire & Cable Div
HYDRATUBE—Recora Co Inc
HYDROELECTRIC—Lift Trucks Inc
HYDROSEC—Kaiser Aluminum & Chemical Sales Inc
HYDROSPERSE—Fidelity Chemical Products Corp
HYDUTY—Davidson Fan Co
HYFLEX—Minnesota Mining & Mfg Co Irvington Div
HYGRADE—Markel (L Frank) & Sons
Hykon Mfg Co 163 E State St (P O Box 923 EP) Alliance Ohio
HYLINK—Burndy Corp
HYLUG—Burndy Corp
HYPER-PURITY GOLD—American Silver Co
HYPERCORE—Moloney Electric Co
HYPERSIL—Westinghouse Electric Corp
HYPOT—Associated Research Inc
HYPRESS—Burndy Corp
HYPRO—Hypro Engineering Inc
Hypro Engineering Inc 700 39th Ave N E Minneapolis 21 Minn
HYPRO SMALL TWIN—Hypro Engineering Inc
HYRAMOTOR—General Controls Co
HYSPLICE—Burndy Corp
Hyster Co 2902 N E Clackamas St Portland 8 Ore
HYTAP—Burndy Corp
HYTOOL—Burndy Corp
HYTORK—Allis-Chalmers Mfg Co
HYVOLT—Crescent Insulated Wire & Cable Co

I

I-EZE—Artistic Lamp Mfg Co Inc
I-LINE—Allen Cooler & Ventilator Inc
I A C—Industrial Automation Corp
IBM—International Business Machines Corp
IC—Interlectric Div El-Tronics Inc
IDI—International Devices Inc
IEFCO—International Electric Fence Co Inc
IEP—Illinois Edison Porcelain
IMC—Insulation Mfrs Corp
IMC Magnetics Corp 570 Main St Westbury NY
IMP—Pyramid Electric Co
IPC—Independent Protection Co Inc
IPF—Industrial Plastic Fabricators Inc
I-T-E Circuit Breaker Co 1900 Hamilton St Philadelphia 30 Pa
I-T-E Circuit Breaker Co BullDog Electric Products Div 7610 Jos Campau Detroit Mich
I-T-E Circuit Breaker Co Greensburg Div P O Box 98 Greensburg Pa
I-T-E Circuit Breaker Co Victor Insulators Div Victor NY
I-T-E Circuit Breaker Co Walker Div PO Box 2384 Station D Atlanta Ga
ITT Components Div P O Box 412 Clifton NJ
IXL—Collyer Insulated Wire Co
Ideal Commutator Dresser Co—see Ideal Industries Inc
Ideal Electric and Mfg Co East First St Mansfield Ohio
Ideal Industries Inc 5136 Park Ave Sycamore Ill
IDEALARC—Lincoln Electric Co
Ilg Electric Ventilating Co 2850 N Pulaski Rd Chicago 41 Ill
ILG-DUALAIR—Ilg Electric Ventilating Co
ILG-JET—Ilg Electric Ventilating Co
ILGETTE—Ilg Electric Ventilating Co
ILGUENT—Ilg Electric Ventilating Co
ILGWINDOWAIRE—Ilg Electric Ventilating Co
ILLINI-HY-CAP—Illinois Condenser Co
Illinois Condenser Co 1616 N Throop St Chicago 22 Ill
Illinois Edison Porcelain McGraw-Edison Co 510 N Pearl St Macomb Ill
Illinois Electric Porcelain Co—see Illinois Edison Porcelain
Illinois Malleable Iron Co—see Appleton Electric Co
Illinois Testing Laboratories Inc 420 N LaSalle St Chicago 10 Ill
Illumitronic Engineering Corp 680 E Taylor Ave Sunnyvale Calif
Ilsco Corp 4730 Madison Rd Cincinnati 27 Ohio
Ilsco Copper Tube & Products Inc—see Ilsco Corp
IMCOR—Insulation Mfrs Corp
IMMERSATHERM—Mercoid Corp
IMPACTOOL—Ingersoll-Rand Co
IMPERIAL—Miller Co
Imperial Electric Co 84 Ira Ave Akron 9 Ohio
Imperial Lighting Products Co—see Emerson Imperial Lighting Co
IMPERIALITE—Emerson-Imperial Lighting Co
IMPERVEX—Crescent Insulated Wire & Cable Co
IMPERVOIL—Crescent Insulated Wire & Cable Co
IMPROV-A-LITE—General Electric Co
IN-BILT—Holophane Co Inc
IN-BUILT—Nutone Inc
IN-LINE—Link-Belt Co
INCA—Phelps Dodge Copper Products Corp
INCA-LIGHTS—Wilson (J A) Lighting & Display Inc
INCELOID—American Products Mfg Co Inc
INCH-MARKED—Republic Steel Corp
INDEECO—Industrial Engineering & Equipment Co Inc
Independent Pneumatic Tool Co—see Thor Power Tool Co
Independent Products Co—see Independent Protection Co Inc
Independent Protection Co Inc 1605-07 S Main St Goshen Ind
Induction Heating Corp 181 Wythe Ave Brooklyn 11 NY
Induction Motors Corp—see IMC Magnetics Corp
INDUCTOR—American-Standard
INDUCTROL—General Electric Co
INDUCTUNER—Mallory (P R) & Co Inc
INDUSTRIAL AIR—Bertram (Harvey P) Co
Industrial Automation Corp 2415 W Montrose Ave Chicago Ill
Industrial Control Panel Co—see Control Panel Corp
Industrial Development Labs Inc 982 River Rd Edgewater NJ
Industrial Devices Inc Edgewater 19 NJ
Industrial Electric & Mfg Co—see McGraw-Edison Co Albion Div
Industrial Electric Switches of Indiana Box 218 New Augusta Ind
Industrial Electrical Works Inc 1509 Chicago St Omaha 2 Neb
Industrial Engineering & Equipment Co Inc 24 Hanley Industrial Ct St Louis 17 Mo
Industrial Engravers Inc 2212 McDonald Ave Brooklyn 23 NY
Industrial Instrument Co—see Seely Instrument Co Inc
Industrial Instruments Inc 89 Commerce Rd Cedar Grove NJ
Industrial Lamp Corp 14th & Blaine Sts Elkhart Ind
Industrial Plastic Fabricators Inc Endicott St Norwood Mass
Industrial Plastic Fittings Co 3891 W 150 St Cleveland 11 Ohio
Industrial Transformer Corp Gouldsboro Pa
INDUSTRIALIST—Duro-Test Corp
Industriline Inc—see Cam-Lok Div Empire Products Inc
INERTAIR—Westinghouse Electric Corp
INERTEEN—Westinghouse Electric Corp
INFINILITE—Integrated Ceilings & Grilleworks Inc
INFINILITE—United Lighting & Ceiling Co
INFRAFLO—Electro-Ray Mfg Co
Ingersoll-Rand Co 11 Broadway NY 4 NY
INHIBISOL—Penetone Co
INKIE—Condi-Lite Corp
Inland Ladder Co 1914 Stanford St Alameda Calif
INMANCO—Insulation Mfrs Corp
INNER-SPRINGS—Urell Inc
INSA-LITE—Sauereisen Cements Co
INSANOL—Westinghouse Electric Co
INSECTO—Solar Electric Corp
INSOLUSEAL—Anaconda Wire & Cable Co
INST-O-VERSE—Franklin Electric Co Inc
INSTA-SEAL—Anderson Electric Corp
INSTA-START—France Mfg Co
INSTANT CALL—Radio Corp of America
INSTANT HEAT—Emerson-Pryne Co
INSTANT HEAT—Wall (P) Mfg Co
INSTEPAC—Onan Div Studebaker-Parkard Corp
Insto-Gas Corp 998 E Woodbridge St Detroit 7 Mich
INSTROF—Cope (TJ) Div Rome Cable Corp
Instrument Laboratories 315 W Walton Pl Chicago 10 Ill
Insul-8-Corp 1369 Industrial Rd San Carlos Calif
INSUL-LOCK—Anthony (F M) Co
INSUL-PIN—Graham Mfg Co
INSULAG—Quigley Co Inc
Insulation Mfrs Corp 565 W Washington Blvd Chicago 6 Ill
INSULINER—Thomas & Betts Co
INSULINK—Burndy Corp
INSULPRENE—Hubbell (Harvey) Inc
INSULSEAL—Eagle-Picher Co
INSULUG—Burndy Corp
INTAIRE—Westinghouse Electric Corp
Integrated Ceilings & Grilleworks Inc 11766 W Pico Blvd Los Angeles 64 Calif
INTENSO—Appleton Electric Co
INTER-LINK—Cable Electric Products Inc
INTER-LINK—Leviton Mfg Co Inc
INTERFERENCE FREE—Cold Cathode Lighting Corp
Interlectric Corp—see Interlectric Div El-Tronics Inc
Interlectric Div El-Tronics Inc 1401 Lexington Ave Warren Pa
INTERLOCK—Hubbell (Harvey) Inc
INTERMATIC—International Register Co
International Business Machines Corp Times Equipment Div 590 Madison Ave New York 22 NY
International Crossarm Co Inc—see Haley (R G) & Co Inc
International Electric Fence Co Inc Box 650 Albert Lea Minn
International Electric Industries Inc—see Beckley Electric Co Inc

International Fermont Machinery Co Inc Ramapo NY
International Lighting Mfg Co 1825 N 19 St St Louis 6 Mo
International Metal Hose Co Ashford Ave Bellevue Ohio
International Oil Burner Co 3800 Park Ave St Louis 10 Mo
International Paper Co Wood Preserving Div 928 Grand Ave Kansas City 6 Mo
International Register Co 2620 W Washington Blvd Chicago 12 Ill
International Seal & Knot Protector Co 58-02 37th Ave Woodside 77 NY
International Telephone & Telegraph Corp Industrial Products Div 15191 Bledsoe St San Fernando Calif
International Trailer Co Inc 725 North Point Rd Baltimore 6 Md
Interstate Drop Forge Co Special Products Div 4051 N 27 St Milwaukee 16 Wis
Interstate Rubber Products Corp 908 Avila St Los Angeles 12 Calif
INTRA-TEL—General Electric Co
INVERTOLITE—Adjustable Fixture Co
Invincible Vacuum Cleaner Mfg Co Dover Ohio
INVISA LINE—Arvin Industries Inc
INVISIBLE RAY—American District Telegraph Co
Iona Ventilater Co Inc 2821-29 W Dauphin St Phila 32 Pa
IONAIRE—Wesix Electric Heater Co
IONOSTAT—United States Radium Corp
IONOTRON—United States Radium Corp
Iron Fireman Electronics Div—see Signet Controls
IRON MIKE—Arco Mfg Co
IRONCLAD—Exide Industrial Div
IRRATHENE—General Electric Co
Irvington Varnish & Insulator Co —see Minnesota Mining & Mfg Co Irvington Div
Irwin Auger Bit Co 92 Grant St Wilmington Ohio
Isert (John H) Co—see Queen Products Co Inc
ISO—Isolantite Mfg Corp
ISO GLAS—Natvar Corp
Iso Industries 600 E Turner St Los Angeles 12 Calif
ISOBESTOS—Natvar Corp
ISOFORCE—General Control Co
Isolantite Mfg Corp Stirling NJ
ISOLASTANE—Natvar Corp
ISOLITE—United States Radium Corp
IVANHOE—Miller Co
IVCO—Iona Ventilator Co Inc
IVI-SPRAY—Minnesota Mining & Mfg Co Irvington Div
IVORY-X—Pass & Seymour Inc

J

J-LINE—Lint (Clyde W)
Jack & Heintz Div Siegler Corp P O Box 6719 Cleveland 1 Ohio
Jack & Heintz Inc—see Jack & Heintz Div Siegler Corp
JACK RABBIT—Hubbell (Harvey) Inc
JACK STACKER—Lewis-Shepard Products Inc
JACKLIFT—Lewis-Shepard Products Inc
JACKSON—Vulcan Electric Co
Jackson Electrical Co 900 W Van Buren St Chicago 7 Ill
Jackson Electrical Instrument Co 124 McDonough St Dayton 2 Ohio
JAGABI—Biddle (James G) Co
Janette Electric Mfg Co LeHigh at Main Sts Morton Grove Ill
JAQUET—Sticht (Herman H) Co Inc
Javex—see Javex Electronics
Javex Electronics P O Box 646 Redlands Calif
Jay Lighting Mfg Co Inc 23-29 Quincy St Brooklyn 38 NY
JAYCANDESCENT—Jay Lighting Mfg Co Inc
JEEP—Mercury Mfg Co
Jefferson Electric Co 25th & Madison Bellwood Ill
Jeffrey Mfg Co 832 N 4 St Columbus 16 Ohio
Jeffries Transformer Co 610 Turner St Los Angeles 12 Calif
Jensen Inc 9331 Freeland Ave Detroit 28 Mich
Jensen Specialties Inc—see Jensen Inc
Jerrold Electronics Corp Jerrold Bldg 15th & Lehigh Ave Philadelphia 32 Pa
JET FLUX—All-State Welding Alloys Co Inc
Jet Line Gun Co Inc—see Jet Line Products Inc
Jet Line Products Inc 615 Fugate Ave Charlotte NC
JET-STREAM—Signal Electric Div King-Seeley Corp
Jeta Inc Yonkers NY
Jeta Metal Fabricators Inc—see Jeta Inc
JETALECTRIC—Jeta Inc
JETAPOWER—Jeta Inc
JETSTREAM—Kent Co
JIF—Jordan Industries Inc
JIFF-E-PLUG—Ackerman-Johnson Co
JIFFY—Eagle Electric Mfg Co Inc
JIFFY—Lint (Clyde W)
JIFFY—Minerallac Electric Co
JIFFY ON—Atlas Metal Industries
Jo-Bell Products Inc 5456 W 111 St Oak Lawn Ill
JO-CLAMP—Jordan Industries Inc
JO-STRAP—Jordan Industries Inc
JOB-SITE—International Trailer Co Inc
JOBMASTER—Ramset Fastening System
Johns-Manville 22 E 40 St New York 16 NY
Johnson Bronze Co 500 S Mill St New Castle Pa
Johnson Mfg Co Inc 600 Anamosa Rd Mt Vernon Iowa
Johnston Foil Mfg Co 6106 S Broadway St Louis 11 Mo
JOINTED-ARM—Woodward Machine Co
Joleco Corp 2513 Baldwin St St Louis 6 Mo
JOMANCO—Johns-Manville
Jones Motrola Corp 432 Fairfield Ave Stamford Conn
Jordan Co 51st & Merrimac Ave Chicago 38 Ill
Jordan Electric Products Electric Storage Battery Co P O Box 6266 Cleveland 1 Ohio
Jordan Electrical Mfg Co—see Jordan Electric Products Electric Storage Battery Co
Jordan Electronic Mfg Co Inc—see Jordan Electronics
Jordan Electronics 121 S Palm Ave Alhambra Calif
Jordan Industries Inc 3030 N W 75 St Miami 47 Fla
Joslyn Mfg & Supply Co 3700 S Morgan St Chicago 9 Ill
Joy Mfg Co H W Oliver Bldg Pittsburgh 22 Pa
Joy Mfg Co Electrical Products Div 1201 Macklind Ave St Louis 10 Mo
JUBILEE—Pullman Vacuum Cleaner Corp
JUMBO PLATE—Sierra Electric Corp
JUMBODUCT—National Electric Div H K Porter Co
JUNIOR COMBO—Mole-Richardson Co
JUTE PLUG—Arro Expansion Bolt Co

K

K-B Lighting Mfg Co 2101 Byberry Rd Phila 16 Pa
K & B—Kirk & Blum Mfg Co
K & H—Krueger & Hudepohl Inc
K-LITE—Kalsan Electric Co Inc
K & M—Keasbey & Mattison Co
K-R—Kruse-Rieke
K-RAY-XH—Condi-Lite Corp
K-S-V—Arex Co
K/W—Kaiser Aluminum & Chemical Sales Inc
KA-LUG—Burndy Corp
Kaiser Aluminum & Chemical Sales Inc Kaiser Center 300 Lakeside Dr Oakland 12 Calif
Kalb Fell Laboratories Inc—see Kin Tel Div Cohu Electronics Inc
Kalson Electric Co Inc 146 Mott St Oceanside NY
KAM-LOK—Kelek Co
KANGO—Porter-Cable Machine Co
KANTARK—Trico Fuse Mfg Co
KANTLEAK—McCaffrey Mfg & Supply Co
KARAK—Ohio Carbon Co
KARBATE—National Carbon Co
KARRI-GO—Silent Hoist & Crane Co
KAST-COIL—Hays Mfg Co
KATHANODE—Gould-National Batteries Inc
Kato Engineering Co 1442 First Ave Mankato Minn
Katolight Corp First Ave at Chestnut (P O Box 891) Mankato Minn
Kauffman Air Conditioning Co 4336 W Pine Blvd St Louis Mo
Kawner Co Niles Mich
KAY-BEE—K-B Lighting Mfg Co
Kay Electric Co Maple Ave Pine Brook NJ
Kay Lab—see Kin Tel Div Cohu Electronics Inc
Kayline Co 1241 E 45 St Cleveland 14 Ohio
KAYMOR—Scranton Storage Battery Corp
KEARNALEX—Kearney (James R) Corp
Kearney (James R) Corp 4236 Clayton Ave St Louis 10 Mo
Keasbey & Mattison Co Butler Ave Ambler Pa
KECO—Kuhlman Electric Co
Kedman Co 233 S Fifth West St Salt Lake City Utah
KEELITE—McKee Div
KEEN ARC—Becker Bros Carbon Co
KEEN CUT—Becker Bros Carbon Co
Kees (F D) Mfg Co 700 Park Ave Beatrice Neb
Keil (Francis) & Sons Inc—see Trine Mfg Corp
KELCO—Kneisley Electric Co
Kelek Co 59 Davis Ave Norwood Mass
Kellems Co Inc 15 Williams St Stonington Conn
Kellems Products Co—see Kellems Co Inc
Kelly Specialty Co 5958-60 Washington Blvd Chicago 44 Ill
KEN-AIRE—Argo Products Co
Kenbert-Arpag Co 220 Coster St Bronx 59 NY
Kendall Co—see Polyken Sales Div
Kennecott Wire & Cable Div Okonite Co Phillipsdale Rumford 16 RI
Kent Co Inc 359 Canal St Rome NY
Kent Lighting Corp 500 Johnson Ave Brooklyn 37 NY
Kent Metal Mfg Co Inc—see Kent Lighting Corp
KENTEX—Kent Lighting Corp
KENTLITE—Kent Lighting Corp
Kerrigan Iron Works Co 1033 Herman St Nashville 2 Tenn
Kester Solder Co 4201 Wrightwood Ave Chicago 39 Illinois
Kett Appliance Co—see Kett Tool Co
Kett Tool Co 5055 Madison Rd Cincinnati 27 Ohio
Key-Hak Corp—see Producers & Distributors Inc
Key-Hak Products Co—see Producers & Distributors Inc
Keyes-Davis Co 89 14th St Battle Creek Mich
KEYNOTE—Edwards Co Inc
KEYSTONE—Diamond Expansion Bolt Co Inc
KEYSTONE—Fullman Mfg Co
Keystone Carbon Co Inc 1935 State St St Marys Pa
Keystone Electric Mfg Co 2228 E Tioga St Phila 34 Pa
Keystone Mfg Co 23328 Sherwood Rd Warren Michigan
Kichler (L D) Co 2101 Superior Ave Cleveland 14 Ohio
Kidde Ultrasonic & Detection Alarms Div Walter Kidde & Co Inc 459 Brighton Rd Clifton NJ
Kidde Ultrasonic & Detection Alarms Inc—see Kidde Ultrasonic & Detection Alarms Div
Kilbury Mfg Co Inc 14529 Hawthorne Blvd Lawndale Calif
Killark Electric Mfg Co 3940 Easton Ave St Louis 13 Mo
KILOTRON—Electric Arc Inc
Kimble Glass Co P O Box 1035 Toledo 1 Ohio
Kin Tel Div Cohu Electronics Inc 5725 Kearney Villa Rd San Diego 12 Calif
KINAMATIC—General Electric Co Apparatus Sales Div
KINATROL—General Electric Co Apparatus Sales Div
Kindorf Co—see Steel City Electric Co
KING—Code Corp
KING—Partrick & Wilkins Co
KING LITE—Rab Electric Mfg Co Inc
King Mfg Corp 3146 N Chicago Ave Chicago 22 Ill
King Refrigerator Corp 76-02 Woodhaven Blvd Glendale 27 NY
Kingston Conley Inc Plainfield NJ
Kinney Electrical Mfg Co 678 Buckeye St Elgin Ill
Kirel Inc CPO Box 387 Kingston NY
Kirk & Blum Mfg Co 3120 Forrer St Cincinnati 9 Ohio
KIRK-KEY—I-T-E Circuit Breaker Co
Kirkland (H R) Co 8 King St Morristown NJ
Kirkwood Carbon Corp 4857 W 130 St Cleveland 35 Ohio
Kirkwood Commutator Corp 4855 W 130 St Cleveland 35 Ohio
Kirlin Co 3435 E Jefferson Ave Detroit 7 Michigan
Kisco Co Inc 2414 De Kalb St St Louis 4 Mo
KITCHEN-AIRE—Stewart Industries Inc
KLAMPSWITCH FUZ—Adam (Frank) Electric Co
KLEARCOR—Western Plastics Corp
Klein (Leo) Electronics 2404 S LaBrea Ave Los Angeles 16 Calif
KLEIN-KORD—Klein (Mathias) & Sons
KLEIN-LINE—Klein (Mathias) & Sons
KLEIN-LOK—Klein (Mathias) & Sons
Klein (Mathias) & Sons 7200 McCormick Rd Chicago 45 Ill
Kliegl Bros Universal Electric Stage Lighting Co Inc 321 W 50 St NY 19 NY
KLIEGLIGHT—Kliegl Bros
KLIEGTRONIC—Kliegl Bros
Kliglite Mfg Co 6822 Lynford St Philadelphia Pa
KLIKSWITCH—General Control Co
Kline Savidge Co Inc 163 N Third St Phila 6 Pa
KLIP-BEAM—Cable Electric Products Inc
KLIP-BILT—Frick-Gallagher Mfg Co
KLIPLOK—Trico Fuse Mfg Co
KLIPTITE—Kulka Electric Corp
KLIXON—Metals & Controls Inc
KLONDIKE—Perfeclite Co
KLOZ-A-LITE—Slater Electric & Mfg Co Inc
Knapp-Monarch Co Bent & Potomac St Louis 16 Mo
Kneisley Electric Co 2501-2509 Lagrange St Toledo 3 Ohio
KNI-TRON—Kneisley Electric Co
Knopp Inc 1307 66th St Oakland 8 Calif
Knox Porcelain Corp 2706 Mynders Ave (P O Box 2031) Knoxville 1 Tenn
Koch (Paul W) & Co—see Lint (Clyde W)
Koch & Lowy Inc 201 E 34 St New York 16 NY
KODAIRE—Sperti Faraday Inc
Koehler Mfg Co 395 Lincoln St Marlboro Mass
Kohler Co Kohler Wis
Koiled Kords Inc Box K Hamden Conn
KOLDBOND—Columbia Electric & Mfg Co
KOLOR KODED—Guth (Edwin F) Co
Kolton Electric Mfg Co 123 New Jersey Railroad Ave Newark 5 NJ
Kondu Corp 1040 W 12 St Erie Pa
KONKRETE KORE—Tilden Tool Mfg Co Inc
KOOL-KOIL—Advance Transformer Co
KOOL-SEL—Pyramid Electric Co
KOOLER-AIRE—United States Air Conditioning Corp
KOOLPAK—Sprague Electric Co
Kopex Div Gemmer Mfg Co 6400 Mt Elliott Ave Detroit Mich
Koppers Co Inc Wood Preserving Div 750 Koppers Bldg Pittsburgh 19 Pa
Kord (Leonard E) Co 2751 N Emerson Ave Indianapolis 18 Ind
Kord Mfg Co Inc 4510 White Plains Rd New York 70 NY
KORDUCT—Johns-Manville
KORKER—U S Expansion Bolt Co
Korns (C C) Co P O Box 483 Johnstown Pa
Kortick Mfg Co 5600 Third St San Francisco 24 Calif
KOTACOIL—Induction Heating Corp
KOTE-LITE—Woodward Machine Co

KOVER-ALL—Jordan Industries Inc
KOVER-GARD—Fanner Mfg Co Electrical Products Div
Kraeuter & Co Inc 585 18th Ave Newark 3 NJ
KRALASTIC—United States Rubber Co
KRALET—Kraloy/Chemtrol Co
Kraloy/Chemtrol Co Electrical Conduit Div 402 W Central Ave Santa Ana Calif
Kraloy Plastic Pipe Co—see Kraloy/Chemtrol Co
KRANE KAR—Silent Hoist & Crane Co
Kritzer Products Div Peerless of America 5800 N Pulaski Rd Chicago 46 Ill
KROMOVER—All-State Welding Alloys Co Inc
Krueger & Hudepohl Inc 1041 Evans St Cincinnati 4 Ohio
Kruse-Rieke Auburn Ind
Kuhlman Electric Co P O Box 288 Birmingham Mich
Kulka Electric Corp 633 S Fulton Ave Mount Vernon NY
Kurman Electric Co 191-193 Newel St Brooklyn 22 NY
KURMELEC—Kurman Electric Co
Kurtzon (Morris) Inc 1420 S Talman Ave Chicago 8 Ill
Kurz & Root Co Inc—see Kurz & Root Sales & Engineering Corp
Kurz & Root Sales & Engineering Corp 232 East North Island St Appleton Wis
KWIK—Dunton (MW) Co
KWIK BAR—Kruse-Rieke
KWIKCHANGE—Leviton Mfg Co Inc
KWIK-KALL—Loge Electronics Inc
KWIK-THERM—Cannon Electric Co
Kwikheat Mfg Co 3732 San Fernando Rd Glendale 4 Calif
KWIKIE—Kwikheat Mfg Co
KWIKWORK—Kwikheat Mfg Co
KYLON—Mystik Adhesive Products Inc
Kyova Fiber Pipe Co 1912 S First St Ironton Ohio

L

LAM Inc 414 Main St Wakefield Mass
LAM Workshop Inc—see LAM Inc
L-M—Line Material Industries
L & P Lighting Box 157 Olive Branch Miss
L P I—Lighting Products Inc
L-R Mfg Co—see Ripley Co Inc
LS-FLOOD—Radiant Lamp Corp
LAB-HEAT—Blue M Electric Co
Labelon Corp Canandaigua NY
Labelon Tape Co Inc—see Labelon Corp
LABSTROBE—Berkshire Laboratories
LACKON—United States Radium Corp
Laclede Steel Co Arcade Bldg St Louis 1 Mo
Laduby Co Inc Boston Post Rd (P O Box 88) Branford Conn
LAG SHIELDS—Rawlplug Co Inc
Laganke Electric Co—see Lake Shore Electric Corp
LAKE—National Time & Signal Corp
Lake Erie Electric Mfg Inc 2952 W 22 St Erie Pa
Lake Mfg Co 2323 Chestnut St Oakland Calif
Lake Shore Electric Inc—see Lake Shore Electric Corp
Lake Shore Electric Corp 205 Willis St Bedford Ohio
Lake Shore Electric Mfg Co—see Lake Shore Electric Corp
LAKESHORE—Aitken-Reed Inc
Lakeshore Industries Div—see Aitken-Reed Inc
LAKIN—Thomas & Betts Co
Laminated Plastics Inc—see Glastic Corp
LAMP SNATCHER—Rich (Phil) Fan Mfg Co Inc
Lampco Lighting Fixture Co—Hasco Electric Corp
LAMPLIGHTER—Telsta Corp
Lamplighter Products Co Inc—see Lightalarms Inc
Lancaster Glass Corp Lancaster Ohio
Lancaster Lens Co—see Lancaster Glass Corp
LANCE MARKER—Keyes-Davis Co
Land-Air Inc 7444 W Wilson Ave Chicago 31 Ill
Lantz Mfg Co Inc Valparaiso Ind
Lapp Insulator Co Inc 35 Gilbert St LeRoy NY
LAQUA—Fidelity Chemical Products Corp
LaRaus Mfg Co Inc LeRoy NY
Larco Inc Route 20 East Painesville Ohio
Larkin Lectro Products Co—see Central Transformer Corp
LaRose (W T) & Associates Inc 31 Ontario St Cohoes NY
Larson Instrument Co 24 Orchard St Tarrytown NY
LaSalle Products Inc—see Markel Electric Products Inc
Lastik Paint Inc 200 S Craig St (Suite 406) Pittsburgh 13 Pa
Lastik Products Co Inc—see Lastik Paint Co
LATROBE—Fullman Mfg Co
Lau Blower Co 2001 Home Ave Dayton 7 Ohio
Laurence (R G) Co Inc 122 Summit St Tenafly NJ
LAVOLAIN—Star Porcelain Co
LAWCO—Velocity Power Tool Co
LAWN-GLO—Line Material Industries
LAY-CIT—Kearney (James R) Corp
LAY-IN—Square D Co
LAYTEX—Kaiser Aluminum & Chemical Sales Inc
LE CARBONE—Carbone Corp
Leach Corp 18435 Susana Rd Compton Calif
LEADER—Keyes-Davis Co
Leader Lamp Mfg Co 476 Broome St NY 13 NY
LEAF-LITE LUMINUS—Luminous Ceilings Inc
LEAK PROOF—Ray-O-Vac Co
LECTERN—Loge Electronics Inc
LECTERN-LYRIC—AOW Corp
LECTRI-LOK—Steber Div Pyle-National Co
LECTROFILTER—McGraw-Edison Co Albion Div
Lectrohm Inc 5560 Northwest Highway Chicago 30 Ill
LECTRONIC LECTERN—Radio Corp of America
LECTRONIC SENTRY—Joy Mfg Co
Ledex Inc 123 Webster St Dayton 2 Ohio
LEDLOK—U S Expansion Bolt Co
Lee-Bert Inc 900 Lapeer St Saginaw Mich
Lee (Walter) Chemical Corp—see Emerson Plastics Corporation
Lee Electric Inc 566 52nd St West New York NJ
Leebaw Mfg Co 65 Wayne Ave Youngstown 2 Ohio
Leece-Neville Co 1374 E 51 St Cleveland 3 Ohio
Leecraft Mfg Co Inc 58 Greene St New York 12 NY
Leeds & Northrup Co 4970 Stenton Ave Phila 44 Pa
LEEFLUOR—Emerson Plastics Corp
Leesona Corp P O Box 1605 Providence 1 RI
Lehigh Fan & Blower Co—see Lehigh Fan & Blower Div
Lehigh Fan & Blower Div Fuller Co Catesauqua Pa
Leibfried (C H) Mfg Corp 95-101 Guernsey St Brooklyn 22 NY
Leigh Building Products Coopersville Mich
Leitch Engineering Corp—see Leitch-Huard
Leitch-Huard Corp Stark & Commercial Sts Manchester NH
LEKOLITE—Century Lighting Inc
LEKTRO-LOK—Linemaster Switch Corp
Leland (G H) Inc—see Ledex Inc
Leland Electric Co 1501 Webster St Dayton 1 Ohio
Lenco Inc 350 W Adams St Jackson Mo
Lenk Mfg Co Franklin Ky
LENOX—Day-Brite Lighting Inc
LENSDRUM—Art Metal Lighting Div
Leonard Electric Mfg Co 3907 Perkins Ave Cleveland 14 Ohio
LEROY—Hirschman-Pohle Co Inc
LESTERLITE—Transolite Corp
LeTourneau (RG) Inc 2399 S MacArthur Longview Tex
LEV-O-LET—Leviton Mfg Co Inc
LEV-O-LITE—Leviton Mfg Co Inc
LEV-O-LOCK—Leviton Mfg Co Inc
LEVEL MASTER—Jo-Bell Products Inc
LEVELWRAP—Continental-Diamond Fibre
Leviton Mfg Co Inc 236 Greenpoint Ave Brooklyn 22 NY
LEVOLIER—McGill Mfg Co Inc
Lew Electric Fittings Co 627 W Lake St Chicago 6 Ill
Lewis Engineering Co 52 Rubber Ave Naugatuck Conn
Lewis-Shepard Products Inc 125 Walnut St Watertown Mass
Lewus Electric Co 1254 W Harrison St Chicago 7 Ill
LEXINGTON—Miller Co
Liberty Bell Mfg Co Swainsboro Ga
Licon Switch & Control Div Illinois Tool Works 6606 W Dakin St Chicago 34 Ill
Lidseen of North Carolina Inc 1000 First St Hayesville NC
Lidseen (Gustave Inc)—see Lidseen of North Carolina
LIFE GUARD—Dorsey (John E) Co
LIFE GUARD—Westinghouse Electric Corp Lamp Div
LIFE LINE—Westinghouse Electric Corp
LIFE-SIZE—Auth Electric Co Inc
LIFE-TIME—Billings & Spencer Co
LIFE-TITE—Anderson Electric Corp
LIFEAMATIC—Sasgen Derrick Co
LIFEGUARD—United Lighting & Ceiling Co
LIFETIME—Slater Electric & Mfg Co Inc
Lifetime Industries—see Lighting Products Inc
LIFT-A-DOR—Alliance Mfg Co Inc
LIFT STACKER—Allied Mfg & Sales Co
Lift Trucks Inc 2425 Spring Grove Ave Cincinnati 14 Ohio
LIFTAMATIC—Sasgen Derrick Co
LIFTROL—Automatic Control Co
LIFTRUK—Silent Hoist & Crane Co
Light & Power Utilities Corp—see L & P Lighting
LIGHT WATCHMAN—Ripley Co Inc
Lightalarms Inc 95 Atlantic Ave Brooklyn 1 NY
LIGHTER LITE—Cable Electric Products Inc
LIGHTGUARD—Exide Industrial Div
Lighting Dynamics Inc 300 N Baldwin Park Blvd City of Industry Calif
Lighting Products Inc 1549 Park Ave West Highland Park Ill
Lightmore Appliance Corp 651-5 Driggs Ave Brooklyn 11 NY
LIGHTNING—Vaco Products Co
LIGHTNING LIFT—Atlas Overhead Door Co
Lightning Protection Engineers—see Security Mfg & Contracting Co
Lightolier Inc 346 Claremont Ave Jersey City 5 NJ
Lightonics P O Box 7211 Oakland Calif
LIGHTRON—Condi-Lite Corp
LIGHTSCAPER—Magni Flood Inc
LIGHTSCAPER—Shalda Mfg Co Inc
LIGHTWARDEN—Electric Cord Co
LIGHTWHEEL—Silvray Lighting Inc
Lima Electric Motor Co Inc Findlay Road Lima Ohio
LIMB-LOPPER—Miller-Robinson Co
LIMIT-LOAD—Buffalo Forge Co
LIMITAMP—General Electric Co
LIMITRON—Bussmann Mfg Div McGraw-Edison Co
LINABESTOS—Keasbey & Mattison Co
LINC-THAW—Lincoln Electric Co
LINCOLN—Forston Co
LINCOLN—Sangamo Electric Co
Lincoln Electric Co 22801 St Clair Ave Cleveland 17 Ohio
LINCOLNDUCTOR—Lincoln Electric Co
LINCOLNTROL—Lincoln Electric Co
LINCOLNTROL—Sangamo Electric Co
LINCOLNWELD—Lincoln Electric Co
LINCWELDER—Lincoln Electric Co
Lindberg Engineering Co 2450 W Hubbard St Chicago 12 Ill
Lindell Electric Control Corp 384 Canal St New York 13 NY
LINE-A-MATIC—Stromberg Div General Time Corp
LINE-A-SPEDE—Allis (Louis) Co
LINE-ARC—Square D Co Electric Controller & Mfg Div
Line Electric Co 229 River St Orange NJ
LINE-FLEX—Perfect-Line Mfg Corp
Line Material Co—see Line Material Industries
Line Material Industries McGraw-Edison Co 700 W Michigan St Milwaukee Wis
LINE-O-HEAT—Smith-Gates Corp
LINE-O-LAMPS—Wiremold Co
LINE-O-LIFE—Carter Motor Co
LINE-O-METER—Simpson Electric Co
LINE-VOLT—Industrial Devices Inc
Linemaster Switch Corp Woodstock Conn
Link-Belt Co 1700 Prudential Plaza Chicago 1 Ill
LINKIT—Burndy Corp
LINOLITE—Frink Corp
Lint (Clyde W) 2323 W 18th St Chicago 8 Ill
Lintern Corp—See Larco Inc
Linton (Horace) Div Hess Goldsmith & Co Inc 1400 Broadway New York 18 NY
LIQUATITE—Electri-Flex Co
LIQUID ICE—Cool-ette Inc
LIQUID TITE—Electrical Fittings Corp
LITE BLOX—Guth (Edwin F) Co
LITE LINER—House-O-Lite Corp
LITE MITE—Stocker & Yale Inc
LITE-N-TUFF—Hamilton Caster & Mfg Co
LITE-PROBE—Amprobe Instrument Corp
LITE-UR-WAY—Edco International Corp
Litecontrol Corp 36 Pleasant St Watertown 72 Mass
Litecraft Mfg Corp 100 Dayton Ave Passaic NJ
LITEKRAFT—Cole (C W) & Co Inc
LITEMASTER—Art Specialty Co
LITEMASTER—Flexo International Corp
LITEMASTER—Globe Lighting Products Inc
Lithonia Lighting Products Co Box 206 Conyers Ga
Littelfuse Inc 1865 Miner St Des Plaines Ill
LITTLE CHAMP—Champion DeArment Tool Co
LITTLE DEVIL—Ohmite Mfg Co
LITTLE GIANT—Lenk Mfg Co
LITTLE INCH—Alkco Mfg Co
LITTLE MAJOR—Arro Expansion Bolt Co
LITTLE-SIX—Burgess Battery Co
LITTLE WIZARD—Round (David) & Son Inc
Littleford Bros Inc 453 E Pearl St Cincinnati 2 Ohio
Lloyd Johnson Co—see Johnson Mfg Co Inc
LLOYDS—Johnson Mfg Co Inc
LO-BRITE—Holophane Co Inc
LO-HED—A E Industrial Div Aircraft Armaments Inc
LO-I—Fairbanks Morse & Co Electrical Div
LO-LOSS—National Electric Div H K Porter Co
LO-NOIZ-LEVEL—Allen Cooler & Ventilator Inc
LO-OHM—Metropolitan Electric Mfg Corp
LO-VOLT—Industrial Devices Inc
LO-X—I-T-E Circuit Breaker Co BullDog Electric Products Div
LO-Z—Metropolitan Electric Mfg Corp
LOAD-LIFT—American Pulley Co
LOAD LIFTER—Shaw-Box Crane & Hoist Div Manning Maxwell & Moore Inc
LOAD-MOBILE—American Pulley Co
LOAD SENTRY—Assembly Products Inc
LOADBUSTER—S & C Electric Co
LOADGUARD—R T & E Corp
LOADMASTER—Lewis-Shepard Products Inc
LOADMASTER—Pennsylvania Transformer Div
LOADSTAR—Fidelity Electric Co Inc
LOADSTAR—Leland Electric Co
LOBOY—Holophane Co Inc
LOCK-ON—Eagle Electric Mfg Co Inc
LOCK-TITE—Thomas & Betts Co
LOCKLITE—Westinghouse Electric Corp Lighting Div
LOCTITE—American Sealants Co
LOCUST—L & P Lighting
LODESTAR—Chisholm-Moore Hoist Div
Loge Electronics Inc 2171 W Washington Blvd Los Angeles 18 Calif
Loge (J M) Sound Engineers—see Loge Electronics Inc
LOK-A-BLOK—Ilsco Corp
LOK-IT—Holub Industries Inc
LOK-ON—Holub Industries Inc
LOKATOR—Edwards Co Inc
LOKFAST—Steber Div Pyle-National Co
LOKTITE—U S Expansion Bolt Co
London Chemical Co Inc 1535 N 31 Ave Melrose Park Ill
LONG-BELL—International Paper Co
Long-Bell Lumber Co—see International Paper Co
LONG LIFE—Goodall Rubber Co
LONG-LIFE—Marvel Lamp Co
LONGRIP—Ridge Tool Co
LOOV-O-LITE—Guth (Edwin F) Co
Lord-Taber Co Inc—see Castle Engineering Co
LORRAINE—Carbone Corp
LOSHAFT—Franklin Electric Co Inc
LOTEMP—Micro Instrument Co
LOUVE-ROCKET—Sun-Lite Mfg Co
LOUVERAY—Duro-Test Corp

LOUVRON—Lightolier Inc
LOVEX—Day-Brite Lighting Inc
LOVOLT—Woodhead (Daniel) Co
Lovsted (CM) & Co Inc 4000 W Marginal Way Seattle 6 Wash
LOW-PEAK—Bussmann Mfg Div McGraw-Edison Co
LOXARMOR—Okonite Co
LOXIN—Star Expansion
LOXON—McGill Mfg Co Inc
LOXSWITCH—Denison (RB) Mfg Co
Lube Jack Co—see Earthworm Boring Machine Inc
LUBO-JET—Trico Fuse Mfg Co
LUCETTE—Versen (Kurt) Co
Lucifer Furnaces Inc Neshaminy Pa
LUCO—Lukens (Thos F) Metal Co
Ludlow Mfg & Sales Co P O Box 101 Needham Heights 94 Mass
Lug-All Co—see Handy Angle Div Lug-All Co
LUG-IT—Thomas & Betts Co
Lukens (Thos F) Metal Co Hedley & Bath Sts Philadelphia 37 Pa
LUMA-CEILING—Pittsburgh Reflector Co
Luma Electric Equipment Co 1607 Coining Drive (P O Box 132) Toledo Ohio
LUMATROL—Micro Balancing Inc
Lumen Inc Moen Ave (P O Box 905) Joliet Ill
LUMEN-AREA—Electro Lighting Corp
LUMENITE—Collyer Insulated Wire Co
Lumenite Electronic Corp 407 S Dearborn St Chicago 5 Ill
Lumi Dyne Corp 627-39 Banning St Los Angeles 12 Calif
LUMI-FLO—Benjamin Div Thomas Industries Inc
LUMI-PEND—Silvray Lighting Inc
LUMI-POST—Silvray Lighting Inc
LUMIGRID—Solar Light Mfg Co
Luminous Ceilings Inc 3701 N Ravenswood Ave Chicago 13 Ill
LUMIRAMA—Litecraft Mfg Co
LUMITONE—Pollak Luminescent Corp
LUMITRON—Metropolitan Electric Mfg Corp
LUNAR—Versen (Kurt) Co
LUNDY—Specialties Inc
LUSTERIZED—American Electric Cable Co
LUSTERLAC—American Electric Cable Co
LUV-R-LOK—Lighting Products Inc
LUVE TILE—Wilson (J A) Lighting & Display Inc
LUVR-LUMINUS—Luminous Ceilings Inc
LUX-GRILL—House-O-Lite Corp
LUXAIRE—Pfaff & Kendall
Luxor Lighting Products Inc 350 5th Ave New York 1 NY
LUXTROL—Superior Electric Co
LUXWOOD—Moe Light Div Thomas Industries Inc
LYNE-O-LARM—Kidde Ultrasonic & Detection Alarms Div
LYNN—Vaco Products Co
Lyon Rural Electric Co 2075 Moore St San Diego 12 Calif
LYTECASTER—Lightolier Inc
LYTELINE—Lightolier Inc
LYTESCAPE—Lightolier Inc
LYTESPAN—Lightolier Inc

M

M-SCOPE—Fisher Research Laboratory Inc
ME—Marathon Electric Mfg Corp
M H Standard Co—see Versabar Corp
MP—Murray Mfg Corp
MPAC—Cutler-Hammer Inc
M S A SHOCKGARD—Mine Safety Appliances Co
M & T—Metal & Thermit Corp
M & T Welding Products Corp 703 37th Ave Oakland Calif
MTC—Marcus Transformer Co Inc
M & W Electric Mfg Co Inc S Walnut St (P O Box 87) East Palestine Ohio
MACHETA—Aerovent Fan Co Inc
Machinery Electrification Inc 56 Hudson St Northboro Mass
Madison Equipment Co 5405 Detroit Ave Cleveland 2 Ohio
MAG-A-TROL—Ward Leonard Electric Co
MAG-EYE—Square D Co
MAGAN-TRAN—Mid-States Welder Mfg Co
MAGIC—Standard Portable Cord Co Inc
MAGIC FRAME—Electro Lighting Corp
MAGIC TOUCH—Rodale Mfg Co Inc
MAGIC WAND—Sticht (Herman H) Co Inc
MAGICLITE—Guth (Edwin F) Co
MAGMOTOR—Carter Motor Co
MAGNA—Ainsworth Lighting Inc
MAGNA—Auto Arc-Weld Mfg Co
MAGNA CHARGER—Fox Products Co
MAGNA-SET—Precision Thermometer & Instrument Co
MAGNA-TRAN—Mid-States Welder Mfg Co
MAGNA WELDER—Auto Arc-Weld Mfg Co
MAGNAPOWER—Dynamatic Div
MAGNAPULSE—Gemco Electric Co
MAGNATORC—Hansen Mfg Co Inc
Magnatran Inc P O Box 211 Kearny NJ
MAGNATROL—Century Lighting Inc
Magnatrol Valve Corp 61 Fifth Ave Hawthorne NJ
MAGNE-LOOP—Memco Engineering & Mfg Co Inc
MAGNE-SPEED—Magnetic Amplifiers Div
MAGNE TREATER—Radio Frequency Laboratories Inc
MAGNEBRAKE—Vickers Inc
MAGNECLUTCH—Vickers Inc
Magnetic Amplifiers Inc—see Siegler Corp Magnetic Amplifiers Div
Magnetics Inc Box 391 Butler Pa
MAGNETRIP—Zinsco Electric Products
Magnetrol Inc 2110 S Marshall Blvd Chicago 23 Ill
MAGNETTE—Heinemann Electric Co
Magni Flood Inc 50 Crary Ave Mt Vernon NY
MAGNI-WHIRL—Blue M Electric Co
MAGNISTROL—Acme Electric Corp
MAGOHM—Electric Regulator Corp
MAIN STREETER—Westinghouse Electric Corp Lighting Div
MAINLINE—Crane (HW) Co
MAINLINER—Westinghouse Electric Corp Lighting Div
Majestic Metal Spinning & Stamping Co Inc 537 Sackett St Brooklyn 17 NY
MAJOR—Gem Electric Mfg Co Inc
Major Equipment Co Inc 4603 W Fullerton Ave Chicago 39 Ill
MAL-LEADS—Arro Expansion Bolt Co
Mall Tool Co 25000 S Western Ave Park Forest Ill
MALLDRILL—Mall Tool Co
Mallory (P R) & Co Inc 30 S Gray St Indianapolis 6 Ind
MALLSAW—Mall Tool Co
MANCHEX—Exide Industrial Div Electric Storage Battery Co
MANGRID—Driver (Wilbur B) Co
MANHATTAN—Raybestos-Manhattan Inc
Manning (RA) Associates—see Manning (RA) Co Inc
Manning (RA) Co Inc 1810 North Ave Sheboygan Wis
Manning Maxwell & Moore Inc 250 E Main St Stratford Conn
MANSON—Okonite Co
MANULUX—Major Equipment Co Inc
MAPLAC—Chance (A B) Co
Marathon Battery Co P O Box 298 Wausau Wis
Marathon Electric Mfg Corp Wausau Wis
Marathon Special Products Corp 12th & Cranberry Sts Erie Pa
Marbelite Co Inc 179 N 10 St Brooklyn 11 NY
Marble Card Electric Corp—see Marble Electric Corp
Marble Electric Corp Gladstone Mich
MARCO—Marvin Electric Mfg Co
MARCO—Progress Mfg Co Inc
Marco Industries 207 S Helena St Anaheim Calif
MARCOFLEX—Marco Industries
Marcus Transformer Co Inc Leesville Ave Rahway NJ
MARGLO—Marvin Electric Mfg Co
Marine Electric Co 195 Fremont San Francisco Calif
Marion Electrical Instrument Co—see Marion Instrument Div Minneapolis-Honeywell Regulator Co
Marion Instrument Div Minneapolis-Honeywell Regulator Co Grenier Field Manchester NH
Mark (Clayton) & Co 1900 Dempster St Evanston Ill
MARK-TIME—Rhodes (M H) Inc
MARKARRIER—Premax Products Div Chisholm-Ryder Co Inc
Markel Electric Products Inc 145 Seneca St Buffalo 3 NY
Markel (L Frank) & Sons Norristown Pa
Market Forge Materials Handling Equipment—see American Pulley Co
Marks Mfg Co 700 N Carpenter St Chicago 22 Ill
MARKSMAN—West Instrument Corp
Markstone Mfg Co 1531 N Kingsbury Chicago 22 Illinois
Marlou Lights Inc Fanwood NJ
Marquette Electric Switchboard Co 311 N Desplaines St Chicago 6 Ill
MARR—Rattan Mfg Co
Marsh (Jas P) Corp—see Marsh Instrument Company
Marsh Heating Equipment Corp—see Marsh (Jas P) Corp
Marsh Instrument Co 3501 Howard St Skokie Ill
Marsh Refrigeration Equipment Co—see Marsh (Jas P) Corp
Marshall (John) Associates Inc Box 2463 Bridgeport 8 Conn
Martin Fan & Blower Co 4634 W 21st Pl Chicago 50 Ill
Martin Stamping & Stove Co Electric Heater Div P O Box 259 Huntsville Ala
Martindale Electric Co 1383 Hird Ave Cleveland 7 Ohio
MARTLITE—Ainsworth Lighting Co
MARVEL—Pullman Vacuum Cleaner Corp
MARVEL—United Electric Motor Co
Marvel Fluorescent Mfg Co—see Marvel Lamp Co
Marvel Lamp Co 307 Newark St Hoboken NJ
Marvel Rack Mfg Co Inc 96 43rd Ave N E Minneapolis 21 Minn
MARVELITE—Marvel Lamp Co
Marvin Electric Mfg Co 648 Santa Fe Ave Los Angeles 21 Calif
Marvin Mfg Co—see Marvin Electric Mfg Co
Marviray Inc—see Seaboard Products Corp
Maryland Lava Co Box 127 Bel Air Md
MASCO FONE—Simpson (Mark) Mfg Co Inc
MASCOT—Simpson (Mark) Mfg Co Inc
Mason (LE) Co 98 Business St (Hyde Park) Boston 36 Mass
Massey (A H) Inc 111 3rd St (P O Box 206) Derby Conn
Massey-Ferguson Industrial Div Massey-Ferguson Inc 1009 S West St Wichita 13N Kans
MASTER—Kaiser Aluminum of Chemical Sales Inc
Master Electric Div Reliance Electric & Engineering Co 24701 Euclid Ave Cleveland Ohio
MASTER-LIGHT—Carpenter Mfg Co
MASTER-MITE—Marsh Instrument Co
MASTER-PRO—Cincinnati Time Recorder Co
MASTER-TEST—Marsh Instrument Co
MASTERBEAM—MiroFlector Co Inc
Mastercraft Plastics Co Inc 95-01 150th St Jamaica 35 NY
MASTERGUARD—Electric Distribution Products Inc
MASTERLINE—Blonder-Tongue Laboratories Inc
Masterlite Mfg Co 2758 Kensington Ave Phila Pa
MATCHLESS—Chisholm-Moore Hoist Div
Matthews (W N) Corp—see Chance (A B) Co
Matthews Electric Heater Mfg Co Albertville Ala
Max-A-Loc Inc El Monte Calif
MAX-FLO—Shaw-Perkins Mfg Co
MAXAW—Cummins Portable Tool Div John Oster Mfg Co
Maxwell Equipment Co—see United States Air Conditioning Corp
McCabe-Powers Body Co 5900 N Broadway St Louis 15 Mo
McCaffrey Mfg & Supply Co 1840 W 14 St Chicago 8 Ill
McCARTHY—Salem Tool Co
McCarthy Electric Co 9640 Grinnell Detroit 13 Mich
McColpin-Christie Corp—see Christie Electric Corp
McCorkle (D H) Co Box 97 Station A Berkeley Calif
McDonald Mfg Co—see Sierra Electric Corp
McDonnell & Miller Inc 3500 N Spaulding Ave Chicago 18 Ill
McFarland (L D) Co McFarland Bldg Sandpoint Idaho
McGill Mfg Co Inc Valparaiso Ind
McGraw-Edison Co Albion Div 704 Clark St N Albion Mich
McK—McKinley (Ben P) Co
McKee Div Thatcher Glass Mfg Co Inc Jeannette Pa
McKee Glass Co—see McKee Div Thatcher Glass Mfg Co Inc
McKinley (Ben P) Co 522 S Clinton St Chicago 7 Ill
McKinley-Mockkenhaupt Co—see McKinley (Ben P) Co
McLarty Systems 2600 Dickman Rd Battle Creek Mich
McLean Engineering Laboratories 70 Washington Rd (P O Box 228) Princeton NJ
McMillan Mfg Co 310 Broadway St Paul 1 Minn
McPhilben Mfg Co Inc 1329 Willoughby Ave Brooklyn 37 NY
Mechanical Industries Production Co 217-223 Ash St Akron 8 Ohio
MECHANICAL MAN—Up-Right Inc
Mechanical Products Inc 1824 River St Jackson Mich
MECO—Marine Electric Co
Meco Metal Box & Panel Mfg Co Inc 2522 W Huntington St Phila 32 Pa
MEGGER—Biddle (James G) Co
MEGOHM TEST—Davenport Mfg Div Duncan Electric Co Inc
MEGOHMER—Sticht (Herman H) Co Inc
Meier Electric and Machine Co Inc 3525 E Washington St Indianapolis 7 Ind
Meierjohan-Wengler 1102 W 9th St Cincinnati 3 Ohio
MEK—Machinery Electrification Inc
MEKONTROL—Machinery Electrification Inc
MELL-O-RAY—Eagle Electric Mfg Co Inc
MELOCALL—Edwards Co Inc
MELODY BELL—Cable Electric Products Inc
MELVIN—Sun-lite Mfg Co
Memco Engineering & Mfg Co Inc Commack LI NY
MEMOTRON—Hughes Aircraft Co
Mend-It Sleeve Mfg Co 3125 Gloria Terrace Lafayette Calif
Mephisto Tool Co Inc Box 16 Hudson NY
MERC-ALARM—Tigerman Engineering Co
MERC-AMATIC—Tigerman Engineering Co
MERCFLOOD—Appleton Electric Co
MERCHANT—Miller Co
MERCO—Corona Mfg Corp
MERCO-FLOOD—Radiant Lamp Corp
MERCO LITE—Great Northern Mfg Corp
MERCO-SPOT—Radiant Lamp Corp
MERCO-WHITE—Radiant Lamp Corp
Mercoid Corp 4201 W Belmont Ave Chicago 41 Ill
MERCONTROL—Mercoid Corp
MERCU-LITE—Sterner Industries
MERCURY—General Control Co
MERCURY—Vulcan Electric Co
Mercury Hydraulics 1632-46 Wazee St Denver 2 Colo
Mercury Mfg Co 4700 W Division St Chicago Ill
Mercury Products Inc Boston Post Rd Guilford Conn
Merwin Mfg Co 19th & German Sts Erie Pa
MET—Metropolitan Electric Mfg Corp
METAL MASTER—Wiss (J) & Sons Co
METAL ROLLING—American Silver Co
Metal & Thermit Corp Rahway NJ
METALCEL—Fannon (John J) Products Co
Metalcraft Products Co Inc 6225 State Rd Philadelphia 35 Pa
Metalectrics Inc 627 Greenwich St New York 14 NY
METALEX—Willard Storage Battery Div Electric Storage Battery Co
Metals & Control Div Texas Instruments Inc—see Metals & Controls Inc
Metals & Controls Inc 34 Forest St Attleboro Mass
METARAY—Wiegand (Edwin L) Co
METCO LIGHTING—Metalcraft Products Co Inc
METEOR—Associated American Winding Machines Inc
METEOR—Chisholm-Moore Hoist Div
METEOR—Metalcraft Products Co Inc
METEOR—Wheeler Reflector Co
Meteor Electric Co Inc—see Leviton Mfg Co Inc
Meteor Mfg Corp Emporium Pa
Meter Devices Co 1001 Prospect Ave SW Canton 6 Ohio
METER-MATIC—International Register Co

METER-MATIC—Leitch-Huard Corp
Meters Inc 5353 N Keystone Ave Indianapolis 20 Ind
METL-CAN—Pyramid Electric Co
Metro Casting Co Inc 47 Grattan St Brooklyn 37 NY
Metron Instrument Co 432 Lincoln St Denver 3 Colo
Metropolitan Device Corp—see Murray Mfg Corp
Metropolitan Electric Mfg Co 2250 Steinway St Long Island City 5 NY
Metropolitan Switchboard Co—see Metropolitan Electric Mfg Corp
Meyer Machine Inc Red Wing Minn
Mica Fabricating Co 53 Central Ave Rochelle Park NJ
MICA-GLAS—National Electric Coil Div
Mica Products Mfg Co—see Mica Fabricating Co
MICABOND—Continental-Diamond Fibre
Micacraft Products Inc 701-03 McCarter Highway Newark 5 NJ
MICALITE—Induction Heating Corp
MICEPAK—Electric Products Co
Michigan Fluorescent Light Div 393 Orchard Lake Ave Pontiac Mich
Michigan Oven Co 415 Brainard Detroit 1 Mich
Mico Instrument Co 80 Trowbridge St Cambridge 38 Mass
MICRELAY—Ebert Electronics Corp
Micro Balancing Inc 191 Herricks Rd Garden City Pk NY
MICRO-LITE—Burton Mfg Co
MICRO-MOTOR—Redmond Co Inc
MICRO-NAMIC—Micro Balancing Inc
MICRO-OHM—Superior Electric Co
MICRO POWER—United States Motors Corp
Micro Switch Corp—see MICRO SWITCH Div
MICRO SWITCH Div of Minneapolis-Honeywell Regulator Co Chicago & Spring Freeport Ill
MICROFIN—Wiegand (Edwin L) Co
MICROFLO—General Control Co
MICROLOY—Capewell Mfg Co
MICRONAIRE—Raytheon Mfg Co
MICROSTAT—Kent Co Inc
MICROTESTER—Simpson Electric Co
MID-JET—Electro Devices Inc
MID-RIP—General Cable Corp
Mid-State Welder Mfg Co 6025 S Ashland Ave Chicago 36 Ill
Mid-West Chandelier Co 15th & Gentry (P O Box 7365) North Kansas City 16 Mo
MIDG-O-MATIC—Hays Mfg Co
MIDGET—Swivelier Co Inc
Midget Heater & Specialty Co 2801 Pacific Ave Tacoma 4 Wash
MIDGET-Ray—Duray Fluorescent Mfg Co
MIDGET TALK—Simpson (Mark) Mfg Co Inc
MIDGETESTER—Simpson Electric Co
Midland Industrial Div Harrison Paint & Varnish Co 1329 Harrison Ave SW Canton 1 Ohio
Midland Paint & Varnish Co—see Harrison Paint & Varnish Co
Midland Wire Corp—see Paranite Wire & Cable Div Essex Wire Corp
Midwest Electric Mfg Co 1639 Walnut St Chicago 12 Ill
Midwest Electric Products Inc 1515 N Front St Mankato Minn
Midwest Lighting Products Co P O Box 536 Edgewater Branch Cleveland 7 Ohio
MIGHTY MIDGET—Coffing Hoist Div
MIGHTY MIDGET—Stanley Power Tools Div
MIGHTY-MITE—Ceilheat Inc
MIGHTY MITE—Mechanical Industries Production Co
MIGHTY MITE—Remington Arms Co Inc
MILESTONE—Jefferson Electric Co
MILL-O-MATIC—Luxor Lighting Products Inc
Miller Co Illminating Div 99 Center St Meriden Conn
Miller (Sanford) Co—see Sanford Miller Co Inc
Miller Electric Co 120 Main St Pawtucket RI
Miller Electric Mfg Co Inc 718 S Bound St Appleton Wis
Miller Equipment Co Inc 13th & New Streets Franklin Pa
Miller Harris Instrument Co 1134 S First St Milwaukee 4 Wis
Miller (T R) Mill Co Inc Brewton Ala
Miller-Robinson Co 7007 Avalon Blvd Los Angeles 3 Calif
Millerbernd Mfg Co Winsted Minn
Millers Falls Co 57 Wells St Greenfield Mass
MILLI-V-METER—Howell Instruments Inc
MILLITE—Westinghouse Electric Corp Lighting Div
Milos System Devices—see United States Petroleum Co
MILWAUKEE—Northern Light Co
Milwaukee Electric Tool Corp 5368 W State St Milwaukee 8 Wis
Milwaukee Parts Corp 607-15 S Sixth St Milwaukee 4 Wis
MIN-A-CLIPS—Minerallac Electric Co
MINALITH—Koppers Co Inc Wood Preserving Div
Mine Safety Appliances Co 201 N Braddock Ave Pittsburgh 8 Pa
MINEON—Drake Mfg Co
MINERALIGHT—Ultra-Violet Products Inc
Minerallac Electric Co 25 N Peoria St Chicago 7 Ill
Mines Equipment Co—see Joy Mfg Co Electrical Products Div
MINI BREAKER—Mechanical Products Inc
MINI-CELL—Neo-Ray Products Inc
MINI-GATOR—Mueller Electric Co
MINI-ISOLATOR—Javex Electronics
MINI-LARM—Russell & Stoll Co Inc
MINI-MARKER—Westline Products Div Western Lithograph Co
MINI-PLATES—Javex Electronics
MINI-SOCKET—Javex Electronics
MINI-TIPS—Ungar Electric Tools
MINI-VOLT—Industrial Devices Inc
MINICUBE—Fullerton Mfg Co
MINIRELAY—Ebert Electronics Corp
Minneapolis Electric & Construction Co 80 S 12 St Minneapolis 3 Minn
Minneapolis-Honeywell Regulator Co 2753 Fourth Ave S Minneapolis 8 Minn
Minneapolis-Honeywell Regulator Co Boston Div 40 Life St Boston 35 Mass
Minneapolis-Honeywell Regulator Co Industrial Div Wayne & Windrim Aves Phila 44 Pa
Minnesota Mining & Mfg Co Electrical Products Div 900 Bush Ave St Paul 6 Minn
Minnesota Mining & Mfg Co Irvington Div 900 Bush Ave St Paul Minn
MINUTE MOUNT—Progress Mfg Co Inc
MIRAC-O-LITE—Cutler Light Mfg Co
MIRACLE—Okun (A L) Co Inc
MIRACO—Mitchell Rand Insulation Co
MiroFlector Co Inc 40 Bayview Ave Inwood LI NY
MIROHAT—MiroFlector Co Inc
MIROLITE—MiroFlector Co Inc
Mirro Co—see Aluminum Co of America
MIRRORSCOPE—Simpson Electric Co
Misener Mfg Co Inc 202-208 Walton St Syracuse 2 NY
Miskella Infra-Red Co E 73rd & Grand Ave Cleveland 4 Ohio
MISSILITE—Marco Industries
MISSING LINK—Mid-State Welder Mfg Co
Mission Appliance Corp Hyde Park Station Los Angeles 43 Calif
Mission Western Engineers Inc—see Western Gear Corp
Mitchell Industries Inc Box 17 Municipal Airport Mineral Wells Tex
Mitchell Lighting Div Compco Corp 1800 N Spaulding Ave Chicago 47 Ill
Mitchell Mfg Co 3200 W Peterson Ave Chicago 45 Ill
Mitchell Moulding Co 1501 Circle Ave Forest Park Ill
Mitchell Rand Insulation Co 51 Murray St NY 7 NY
Mitchell-Rand Mfg Corp Insulation Div—see Mitchell Rand Insulation Co
MITCO—Mitchell Moulding Co
MITEE—International Electric Fence Co Inc
MITI-MAST—Utility Service Co Inc
MIX-A-PHONE—Simpson (Mark) Mfg Co Inc
MIXED-FLO—Broan Mfg Co Inc
MO-DE-CO Div Modern Development Co Box 196 Encino Calif
MOBIL BREEZE—Frigid Inc
Mobile Aerial Towers Inc 1730 N Harrison St Fort Wayne Ind
MOBILEX—Day-Brite Lighting Inc
MOCO—Michigan Oven Co
MODERN—Roche (Paul C) Co Inc
Modern Development Co—see MO-DE-CO Div
Modern Electric Laboratory—see Blue M Electric Co
Modern Light Co Inc 7809 Maplewood Industrial Court St Louis 17 Mo
Modern Swimming Pool Co Inc 1 Holland Ave White Plains NY
Modern Telephone Corp—see Roche (Paul C) Co Inc
MODERNAIRE—Electro Lighting Corp
Modernheat Cable Corp P O Box 754 Kingsport Tenn
MODU-AIRE—United States Air Conditioning Corp
MODU GLO—Marvin Electric Mfg Co
MODU-LUMINUS—Luminous Ceilings Inc
MODU-WAVE—Sciaky Bros Inc
MODULAR—Couch (S H) Co Inc
MODULITE—Electronic Control Corp
MODULITE—Major Equipment Co Inc
MODULITE—Marco Industries
MODULUME—LAM Inc
Moe Light Div Thomas Industries Inc 207 E Broadway Louisville Ky
MOHAWK—Frigid Inc
MOHAWK—Surrette Storage Battery Co Inc
MOIST-O-GRAPH—Minneapolis-Honeywell Regulator Co Industrial Div
MOISTURE MAGNET—Remington Corp
Moldcast Mfg Co 236 South St Newark 5 NJ
MOLDOCHILL—Capewell Mfg Co
MOLE—Burndy Corp
Mole-Richardson Co 937 N Sycamore Ave Hollywood 38 Calif
MOLEFLECTOR—Mole-Richardson Co
MOLEVATOR—Mole-Richardson Co
MOLIMITER—Burndy Corp
Molly Corp 230 N Fifth St Reading Pa
Moloney Electric Co 5390 Bircher Blvd St Louis 20 Mo
MON-O-LAG—Monarch Electric Div El-Tronics Inc
Mona Industries Inc Paterson 17 NJ
MONAMINE—Mona Industries Inc
Monarch Electric Corp—see Monarch Electric Div El-Tronics Inc
Monarch Electric Div El-Tronics Inc 118 E First St Jamestown NY
Monarch Fuse Co Ltd—see Monarch Electric Div El-Tronics Inc
Monarch Lighting Fixtures Corp—see Ender-Monarch Corp
MONASTRIP—Mona Industries Inc
MONELITE—Dockson Corp
Monitor Controller Co—see Monitor Controller Div Atlee Corp
Monitor Controller Div Atlee Corp 99 Grove St Rockland Mass
MONITROL—Monitor Controller Div Atlee Corp
MONO-BOLT—Chance (A B) Co
MONO MOTOR—Redmond Co Inc
MONOGRAM—Refrigerating Specialties Co
MONOLARM—Russell & Stoll Co Inc
MONOMAST—Hyster Co
MONOWELD—All-State Welding Alloys Co Inc
MONSON—Portland-Monson Slate Co
Moon Mfg Co 108 N Jefferson St Chicago 6 Ill
MOORE—Chisholm-Moore Hoist Div
MORELITE—Rambusch Decorating Co
MORPHO—Cannon Electric Co
Morrison Steel Products Inc 601 Amherst St Buffalo 7 NY
Morrow Co 400 W Madison St Chicago 6 Ill
Morse (Frank W) Co 354 Congress St Boston 10 Mass
Morse Chain Co Borg Warner Corp Ithaca NY
Mossman (Donald P) Inc P O Box 265 Brewster NY
MOTHER'S HELPER—Simpson (Mark) Mfg Co Inc
MOTO-LIFT—Safway Steel Products Inc
MOTO-MITE—Globe Industries Inc
Moto-Truc Co 1953 E 59 St Cleveland 3 Ohio
MOTODRIVE—Reeves Pulley Div Reliance Electric & Engineering Co
MOTOGEAR—Link-Belt Co
MOTOMOUNT—U S Electrical Motors Inc
Motor Generator Corp—see Hobart Bros
MOTOR SENTINEL—Bryant Electric Co
Motor Specialty Inc 2801-17 Lathrop Ave Racine Wis
Motor X Products Co—see Industrial Electric Switches of Indiana
MOTORDOR—Broan Mfg Co Inc
MOTORDUCERS—Falk Corp
Motoresearch Co 1600 Junction Ave Racine Wis
MOTORLITE—Ward Leonard Electric Co
Motorola Communications & Electronics Inc 4501 W Augusta Blvd Chicago 51 Ill
MOTORTRON—Bussmann Mfg Div McGraw-Edison Co
MOTOTROL—Automatic Control Co
MOTRAC—Motorola Communications & Electronics Inc
MU-STAT—Precision Thermometer & Instrument Co
Mueller Climatrol Div Worthington Corp 2005 W Oklahoma Ave Milwaukee 1 Wis
Mueller Electric Co 1555G E 31 St Cleveland 14 Ohio
Mueller (L J) Furnace Co—see Mueller Climatrol Div
Mullenbach Electrical Mfg Co—see Mullenbach Div
Mullenbach Div Electric Machinery Mfg Co 2100 E 27 St Los Angeles 58 Calif
Mult-A-Frame Corp 6401 Epworth Blvd Detroit 10 Mich
Mult-A-Frame Div Ainsworth Precision Castings—see Mult-A-Frame Corp
MULTALARM—Automatic Control Co
MULTI—Duro Fittings Co
Multi-Amp Corp—see MULTI-AMP Div
MULTI-AMP Div Multi-Amp Electronics Corp 465C Lehigh Ave Union NJ
MULTI-BREAKER—Square D Co
MULTI-CALKS—Rawlplug Co Inc
MULTI-COM—Radio Corp of America
MULTI-DIAMETER—U S Expansion Bolt Co
MULTI-DUTY—Emerson Electric Mfg Co
Multi Electric Mfg Inc 4223 W Lake St Chicago 24 Ill
MULTI-MOUNT—Blackburn (Jasper) Corp
MULTI-SIZE—Diamond Expansion Bolt Co Inc
MULTI-START—Scranton Storage Battery Corp
MULTI-TAC—Simpson (Mark) Mfg Co Inc
MULTI-TAP—Woodhead (Daniel) Co
MULTI-USE—U S Expansion Bolt Co
MULTI-VENT—Pyle-National Co
MULTIFLEX—Helwig Carbon Products Inc
MULTIFONE—Simpson (Mark) Mfg Co Inc
MULTIGUARD—Lincoln Electric Co
MULTIPLE UNIT—Hevi Duty Electric Co
MULTISCOPIC—Kulka Electric Corp
MULTISTAK—Lake Shore Electric Corp
MULTITAP—Anderson (Albert & JM) Mfg Co
MULTITHERM—Clarage Fan Co
Muncie Gear Works Inc P O Box 433 Cordele Ga
Murdock Corp 158 Carter St Chelsea 50 Mass
MUREX—Metal & Thermit Corp
Murray (D A) Co Inc 632 N Mill St Tipton Ind
Murray Equipment Co Inc 14011 Oakland Ave Detroit 3 Mich
Murray Mfg Corp 1250 Atlantic Ave Brooklyn 16 NY
MUSI-TALK—Fanon Electronic Industries Inc
Mutual Foundry & Machine Co—see Potter & Rayfield Inc
MY-T-MIDGET—American Rectifier Corp
Mycalex Corp of America 125 Clifton Blvd Clifton NJ
Myers Electric Products Inc 3019 S Vail Ave Los Angeles 22 Calif
Mystik Adhesive Products Inc 2635 N Kildare Ave Chicago 39 Ill

N

NE—National Electric Div H K Porter Co
N E BEND—Burbank Electrical Products
NEM—National Engineering & Mfg Co
N J—New Jersey Porcelain Co Inc
N L Corp 2480 E 22 St Cleveland 15 Ohio
N T C—Keystone Carbon Co Inc
N W L—Nothelfer Winding Labs Inc
N Y Revolving Portable Elevator Co—see Revolvator Co
NAIL-IT—Eagle Electric Mfg Co Inc
NAILIN—Rawlplug Co Inc
NALCO—National Lead Co
NALCO—North American Electric Lamp Co
NALCOBRITE—North American Electric Lamp Co
Nankervis (Geo L) Co 15300 Fullerton Ave Detroit 27 Mich
NARADRECT—Narragansett Wire Co

NARADUCT—Narragansett Wire Co
NARAWIRE—Narragansett Wire Co
NARAX—Narragansett Wire Co
Narragansett Wire Co 1125 Main St Pawtucket RI
Natale Machine & Tool Co 339 Highway #17 Carlstadt NJ
Natco Corp 327 Fifth Ave Pittsburgh 22 Pa
NATIONAL—General Hardware Mfg Co Inc
National Acme Co Electrical Controls Div 170 E 131 St Cleveland 8 Ohio
National Appliance Co—see Ventrola Mfg Co
National Band & Tag Co 721 York St Newport Ky
National Carbon Co 30 E 42 St New York 17 NY
National Cathode Corp 317 E 34 St New York 16 NY
National Decalcomania Corp 56 & Chestnut Sts Phila 39 Pa
National Electric Coil Div McGraw-Edison Co 800 King Ave Columbus 16 Ohio
National Electric Controller Co 7070 Glenwood Ave Chicago 26 Ill
National Electric Div H K Porter Co Inc Porter Bldg Pittsburgh 19 Pa
National Electric Welding Machines Co 1846-1916 N Trumbull St Bay City Mich
National Engineering & Mfg Co 16th & Lamine Sts Sedalia Mo
National Fireproofing Corp—see Natco Corp
National Jerrold Systems Inc—see Jerrold Electronics Corp
National Lead Co 111 Broadway NY 6 NY
National Poultry Band Co—see National Band & Tag Co
National Price Service—see Henderson-Hazel Corp
NATIONAL RHEOSTAT—National Electric Controller Co
National Specialties Co Inc 1902 Howell St Ft Wayne 7 Ind
National-Standard Co 601 N 8th St Niles Mich
National Super Service Co 1946 N 13 St Toledo Ohio
National Supply Co—see National Supply Div Armco Steel Corp
National Supply Div Armco Steel Corp Two Gateway Center (P O Box 416) Pittsburgh 30 Pa
National Time & Signal Corp 21800 Wyoming Ave Detroit 37 Mich
NATIONAL TIMER—National Time & Signal Corp
National Varnished Products Corp—see Natvar Corp
NATLOOP—National Electric Coil Div
NATSCO—National Time & Signal Corp
Natvar Corp 211 Randolph Ave Woodbridge NJ
NAUTILUS—Linemaster Switch Corp
Naybor (E V) Laboratories Inc 26 Manorhaven Blvd Port Washington NY
NE-O-LITE—Speedex Mfg Co
NEASBESTOS—National Electric Div H K Porter Co
NEATPAK—Federated Metals Div American Smelting & Refining Co
NECCOBOND—National Electric Coil Div
NELEX—Nelson Electric Mfg Co
Nelson Electric Mfg Co P O Box 5385 Tulsa Okla
Nemco Electric Co 210 Second Ave Seattle 4 Wash
NEMCRAFT—Nemco Electric Co
NEO-GLO—Markel Electric Products Inc
Neo-Ray Products Inc 315 E 22 St NY 10 NY
NEO-SOL—Charleston Rubber Co
NEO-TIME—Square D Co Electric Controller & Mfg Div
NEOCORK—Auburn Mfg Co
NEOFIL—Bishop Mfg Corp
NEOLAY—Kaiser Aluminum & Chemical Sales Inc
NEOLINE—Anaconda Wire & Cable Co
NEOSIGN—Anaconda Wire & Cable Co
NEOTEL—General Cable Corp
NEOTEX—Woodhead (Daniel) Co
NEOTROL—Square D Co Electric Controller & Mfg Div
NEPCO—National Electric Div H K Porter Co
NEPCO-LOK—National Electric Div H K Porter Co
NEPCO-SIL—National Electric Div H K Porter Co
NEPCODUCT—National Electric Div H K Porter Co
NEPCONOL—National Electric Div H K Porter Co
Nepo Mfg Co 4230 N Sayre Chicago 34 Ill
NEPTUNE—Recora Co Inc
Network Industries Inc P O Box 397 Bayonne NJ
NEUTRO—Dunton (M W) Co
NEVA GLARE—Marlou Lights Inc
NEVER CLOG—Pullman Vacuum Cleaner Corp
NEVER-CREEP—Chance (A B) Co
NEVER-SLIP—Miller Equipment Co Inc
New England Carbide Tool Co Inc 55 Commercial St Medford 55 Mass
New England Electrical Works Inc 365 Main St Lisbon NH
New Hampshire Ball Bearings Inc Route 202 Peterborough NH
New Jersey Fire Alarm Co—see Newark District Telegraph Co
New Jersey Meter Co Inc 350 Leland Ave Plainfield NJ
New Jersey Porcelain Co Inc Plum St & NY Ave (P O Box 908) Trenton 5 NJ
New Jersey Zinc Co 160 Front St New York 38 NY
New York Fluorescent Mfg Co Inc 162 Bowery New York 12 NY
NEW YORKER—Sun-Lite Mfg Co
Newage Industries Inc 222 York Rd Jenkintown 41 Pa
Newage International Inc—see Newage Industries Inc
Newark District Telegraph Co 372 Plane St Newark 2 NJ
Newart Mfg Co 6725 Machinery Ave Cleveland Ohio
Newcomb Audio Products Co 6824 Lexington Ave Hollywood 38 Calif
Newman Electric Motors Inc 357 Wilson Ave Newark 5 NJ
Niagara Transformer Corp 1751 Dale Rd Buffalo 25 NY
NIAGRITE—Johns-Manville
Nicad Div Gould-National Batteries Inc Easthampton Mass
Nichols Wire & Aluminum Co 1725 Rockingham Rd Davenport Iowa
Nickel Cadmium Battery Corp—see Nicad Div
NICRO—Fresh'nd-Aire Div Cory Corp
NIGHTINGALE—Adjustable Fixture Co
Nikoh Tube Co 5000 S Whipple St Chicago 32 Ill
NILSTAIN—Driver (Wilbur B) Co
9000 ARC—Mid-States Welder Mfg Co
99999 FINE—American Silver Co Inc
NITE-BEAM—Eagle Electric Mfg Co Inc
NITE HAWK—Ray-O-Vac Co
NITE-O-LITE—Hoffman Engineering Corp
NITEAIR—Lau Blower Co
NITELIGHTER—Fisher-Pierce Co
NO FLAME COR—Cornish Wire Co Inc
NO-LIFT—Self-Lifting Piano Truck Co
NO-SHOK—Bell Electric Co
NO-SPARK—Co-operative Utilities Co Inc
NOBATRON—Sorensen & Co
NOBLELOY—Continental-Wirt Electronics Corp
NOBLETTE—Continental-Wirt Electronics Corp
NOBRUSH—Georator Corp
NODRSEAL—Johns-Manville
Noel Mfg Co 3 W 18 St New York 11 NY
NOFAL—Rite-O-Lite Co
NOKORODE—Dunton (M W) Co
NOLO—Auburn Mfg Co
NORBLO—Northern Blower Div
Nordberg Mfg Co 3073 S Chase Ave Milwaukee 1 Wis
NORK—General Hardware Mfg Co Inc
Norky Mfg Corp P O Box 669 Covington Ky
NORLICO—Northern Light Co
NORMAN ELECTRIC CO—Star-A-Electric Mfg Co Inc
Normandy Electric Wire Corp 125 Second St Brooklyn 31 NY
NORPAK—Square D Co
NORSOLV—Northwoods Mfg Chemists Inc
North American Electric Lamp Co 1520 North 13th St St Louis 6 Mo
NORTH-LITE—Great Northern Mfg Corp
North Shore Nameplate Inc—see North Shore Nameplate Div Anodyne Inc
North Shore Nameplate Div Anodyne Inc 1270 N W 165 St North Miami Beach Fla
Northbrook Products Inc Industrial Div 624 S Michigan Ave Chicago 5 Ill
Northern Blower Co—see Northern Blower Div
Northern Blower Div Buell Engineering Co 6434 Barberton Ave Cleveland 2 Ohio
Northern Incandescent Lamp Co 1 Newark St Hoboken NJ
Northern Light Co 1661 N Water St Milwaukee 2 Wis
NORTHERN LIGHTS—Northern Incandescent Lamp Co
Northwestern Electric Co 1750 N Springfield Ave Chicago 47 Ill
NORTHWIND—Emerson Electric Mfg Co
Northwoods Mfg Chemists Inc Porterfield Wis
Nothelfer Winding Labs Inc 220 Ewingville Rd (P O Box 455) Trenton 3 NJ
Novelty Lighting Corp—see N L Corp
NOVOID—G & W Electric Specialty Co
NU-BLAC—Star Porcelain Co
NU-BRAZE—American Silver Co Inc
NU-LITE—Dependable Electric Mfg Co Inc
NU-WAY—Marshall (John) Associates Inc
NUARC—Electric Arc Inc
Nutone Inc Madison & Red Bank Roads Cincinnati 27 Ohio
Nutting Truck and Caster Co 1201 W Division St Fairbault Minn
Nye Tool Co 4120-30 Fullerton Ave Chicago 32 Ill
NYLAFLOW—Polymer Corp
NYLASINT—Polymer Corp
NYLATRON—Polymer Corp
NYLAWELD—Polymer Corp
NYLCLAD—Belden Mfg Co
NYLEZE—Phelps Dodge Copper Products Corp
NYLOX—Hardman (H V) Co Inc
NYLTEXENAMEL—Belden Mfg Co
NYTROL—Walker Brothers

O

O-B—Ohio Brass Co
O-E—Arro Expansion Bolt Co
OEM—Oliver Electrical Mfg Co
OK—Appleton Rubber Co Inc
OK—Eagle Electric Mfg Co Inc
O K—General Cable Corp
O-K—Henderson Electric Co
O P BREAKER—Adam (Frank) Electric Co
O-PAC—Opad Electric Co
O-Z—Zernickow (O) Co
O Z Electrical Mfg Co Inc 262 Bond St Brooklyn 17 NY
OAMCO—Overbaugh & Ayers Mfg Co
O'Brien Electric Corp 6514 Santa Monica Blvd Hollywood 38 Calif
OBROUND—Crouse-Hinds Co
OBSERVER—Blonder-Tongue Laboratories Inc
OCCO—Tocco Div Ohio Crankshaft Co
OCT-O-DUCT—Soapstone Duct Co
OCTA-TUBE—Millerbernd Mfg Co
OCULITE—Burton Mfg Co
ODOR-MASTER—Edco International Corp
ODOROUT—Westinghouse Electric Corp Lamp Div
Ohio Brass Co 380 N Main St Mansfield Ohio
Ohio Carbon Co 12508 Berea Rd Cleveland 11 Ohio
OHIOHM—Ohio Carbon Co
OHM-SPUN—States Co
Ohmite Mfg Co 3601 Howard St Skokie Ill
OHMOID—Wilmington Fibre Specialty Co
OHMSTONE—Johns-Manville
OILFILTER—Controls Co of America
OILITE—Amplex Div Chrysler Corp
OKLIP—Burndy Corp
OKOCORD—Okonite Co
OKOLENE—Okonite Co
OKOLITE—Okonite Co
Okonite Co Passaic NJ
Okonite-Callender Cable Co—see Okonite Co
OKOPRENE—Okonite Co
OKOSEAL—Okonite Co
OKOTHERM—Okonite Co
OKOVAR—Okonite Co
Okun (A L) Co Inc 109-02 Van Wyck Expressway South Ozone Park NY
Olin Conductors Metals Div P O Box 989 Chattanooga Tenn
Oliver Electrical Mfg Co P O Box 217 Battle Creek Mich
Oliver Iron & Steel Corp—see Oliver Electrical Mfg Co
OLYMPIC—Lint (Clyde W)
OLYMPIC—Sun-Lite Mfg Co
Olympic Instruments Inc Vashon Wash
Omark Industries Inc 9701 S E McLoughlin Blvd Portland 22 Ore
OMEGA—Wakefield Lighting Div
OMEGA-RAY—Luxor Lighting Products Inc
OMNI-GLOW—Industrial Devices Inc
Onan Div Studebaker-Packard Corp 2515 University Ave S E Minneapolis 14 Minn
Onan (D W) & Sons Inc—see Onan Div Studebaker-Packard Corp
ONE-COTE—Eagle-Picher Co
ONE-PIECE—Buchanan Electrical Products Corp
ONE SHOT—Hein-Werner Corp
ONE TIME—Ware Fuse Corp
O'Neil-Irwin Mfg Co—see Di-Acro Corp
ONEPACK—Electric Products Co
ONLI—Perfeclite Co
Opad Electric Co 43 Walker St New York 13 NY
OPALITE—Lightolier Inc
OPALUME—Litecraft Mfg Corp
OPALUX—Lightolier Inc
OPTIPLEX—Lightolier Inc
OPTOMATIC—Trico Fuse Mfg Co
Orangeburg Mfg Co 375 Park Ave New York 22 NY
Orangeville Mfg Co Orangeville Pa
ORBLITE—Steber Div Pyle-National Co
ORGANO-FLUX—London Chemical Co Inc
ORGOBLOS—Spencer Turbine Co
ORTHO—Gibson Mfg Co
ORTHONULL—General Radio Co
ORTO—Line Material Industries
Osoco Mfg Co P O Box 7268 Ft Worth Tex
Oster Mfg Co 1340 E 289 St Wickliffe Ohio
OUTERCOM—Hammarlund Mfg Co Inc
OVALIT—Kliegl Bros
OVALITE—Line Material Industries
OVALTUBE—Plastoid Corp
Overbaugh & Ayres Mfg Co 411 S Clinton St Chicago 7 Ill
Overly-Hautz Co 11500 Madison Ave Cleveland 2 Ohio
Oviatt (D C) Co 2174 Lakeside Ave Cleveland 14 Ohio
Owatonna Tool Co 178 N Cedar St Owatonna Minn
Owens Illinois Glass Co—see Kimble Glass Co
Oxford Electric Corp Hudson Lamp Dix—see Hudson Lamp Co
OXOFF—Anaconda Wire & Cable Co
Oxwall Tool Co Ltd 928 Broadway New York 10 NY
OZITE—G & W Electric Specialty Co

P

PAD Inc—see Producers & Distributors Inc
P-A-X—Automatic Electric Co
P & C Hand Forged Tool Co—see P & C Tool Co
P & C Tool Co Box 5926 Milwaukee P O Portland 22 Ore
PD-X—Phelps Dodge Copper Products Corp
PIC—General Controls Co
PIV—Link-Belt Co
P & K—Pfaff & Kendall
PLM Products Inc 3871 W 150 St Cleveland 11 Ohio
P-N—Pyle-National Co
PNR—Rockbestos Wire & Cable Co
P & P—Potter & Brumfield Div
PQ—Pekcu Co
PR—Plymouth Rubber Co Inc
P & R—Potter & Rayfield Inc
P & S—Pass & Seymour Inc
PTC—Precision Transformer Corp
PUC—Royal Electric Corp
PV DUIT—Carlon Products Corp
P-W Industries Inc 11200 Roosevelt Blvd Philadelphia 15 Pa
P & W Co—see Partrick & Wilkins Co
PWC—Plastic Wire & Cable Corp
PACEMAKER—Hubbell (Harvey) Inc

PACEMAKER—Lightolier Inc
PACEMAKER—Wakefield Lighting Div
Pacific Electric Mfg Co—see Federal Pacific Electric Co
PACKAGE-AIRE—United States Air Conditioning Corp
Page Steel & Wire Div American Chain & Cable Co Inc P O Box 692 Monessen Pa
PAGESAVER—Auth Electric Co Inc
Paine Co 6 Westgate Rd Addison Ill
PAK-IT—American Pulley Co
Palco Mfg Co 1260 Pennsylvania Ave San Francisco 7 Calif
Paley Mfg Corp—see Circle Air Industries Inc
Palmer Electric & Mfg Co 24 Water St Wakefield Mass
PAN-L-HEAT—Jensen Inc
PANALARM—Panellit Div ISI Inc
PANASTAT—Panellit Div ISI Inc
PANCAKE—Wiremold Co
PANEL-CHANEL—Stahlin Bros Inc
PANEL-LUMINOUS—Luminous Ceilings Inc
PANELAIRE—Lighting Products Inc
Panellit Div ISI Inc 7401 N Hamlin Ave Skokie Ill
Panellit Inc—see Panellit Div ISI Inc
PANELSCOPE—Waterman Products Co Inc
PANELUX—Lighting Products Inc
Panelyte Div St Regis Paper Co Enterprise Ave Trenton NJ
PANG—Automatic Vulcanizers Corp
PANTRO—Control Panel Corp
PAR-BEAM-LITE—Swivelite Co Inc
PARA-HEAT—Essex Wire Corp
PARACORE—Kaiser Aluminum & Chemical Sales Inc
PARADOME—Holophane Co Inc
PARAFLO—Day-Brite Lighting Inc
Paragon Electric Co 1600 12th St Two Rivers Wis
Paragon Electrical Mfg Co—see Electro Dynamics Corp
PARAGRID-TILE—Wilson (J A) Lighting & Display Inc
PARAGROOVE—Line Material Industries
PARALOUVER—Day-Brite Lighting Inc
PARAMOUNT—Earl Electric Mfg Corp
Paramount Industries Inc G-1080 Ballanger Rd Flint 4 Mich
PARANITE—Essex Wire Corp
Parco Mfg Co—see Rogers Electric Laboratories
Park Metalware Co Inc—see Xcelite Inc
Park Nameplate Co Inc 34-10 Linden Place Flushing NY
PARK SQUARE—Litecraft Mfg Corp
Parker Electrical Mfg Co 221 Washintgon St Oakland 7 Calif
PARMATIC—General Electric Co Apparatus Sales
PARQUAY—Brown Co
Parr Electric Co—see Parr Mfg Corp
Parr Mfg Corp 44 Austin St Newark 2 NJ
Partlow Corp 230 Campion Rd New Hartford NY
Partrick Carter & Wilkins Co—see Partrick & Wilkins Co
Partrick & Wilkins Co 51 N Seventh St Phila 6 Pa
Pass & Seymour Inc Syracuse 9 NY
PASSMOUR—Pass & Seymour Inc
PATENT-FLEX—Wil-Son Mfg Co
Patent Scaffolding Co Inc 38-21 12th St Long Island City 1 NY
PATH FINDER—Cannon Electric Co
PATH OF LIGHT—Touch-Plate Mfg Corp
PATHFINDER—Newcomb Audio Products Co
PATHFINDER—York Div Borg-Warner Corp
PATTERN-LITE—Keystone Electric Mfg Co
Pattern Products P O Box 135 Union NJ
PEAK DRILL—Star Expansion
Pedrick Tool & Machine Co 3640 N Lawrence St Phila 40 Pa
PEDRIMATIC—Pedrick Tool & Machine Co
PEE-WEE—Mueller Electric Co
Peer Inc 1220 Milton St Benton Harbor Mich
PEERLESS—General Cable Corp
Peerless Electric Co—see Peerless Electric Div H K Porter Co Inc
Peerless Electric Div H K Porter Co Inc 1401 W Market St Warren Ohio
Peerless Mfg Co—see Valley Fan Mfg Co
PEERLITE—Guth (Edwin F) Co
PEGI—Adalet Mfg Co
Pekcu Co 1227 McDonald Ave Brooklyn 30 NY
PEMCO—Parker Electrical Mfg Co
PEMCO—Philadelphia Electrical & Mfg Co
PENCIL OF LIGHT—Electronic Control Corp
Penco Div Alan Wood Steel Co 200 Brower Ave Oaks Pa
PENDLUM—Versen (Kurt) Co
PENDOME—Versen (Kurt) Co
Penetone Co 74 Hudson Ave Tenafly NJ
Penetray Corp 615 Front St Toledo 5 Ohio
PENETROX—Burndy Corp
PENN—Solar Electric Corp
Penn Controls Inc Goshen Ind
PENN-CRIMPS—Penn-Union Electric Corp
Penn Electric Switch Co—see Penn Controls Inc
Penn Fibre & Specialty Co Inc 2024 F Westmoreland St Phila 34 Pa
Penn (Wm) Fluorescent Light Mfg Co 426 E Allegheny Ave Philadelphia 34 Pa
PENN LITE—Penn (Wm) Fluorescent Light Mfg Co
PENN-ONS—Penn-Union Electric Corp
PENN-SLEEVES—Penn-Union Electric Corp
PENN-STEMS—Penn-Union Electric Corp
PENN-TAPS—Penn-Union Electric Corp
Penn-Union Electric Corp 315 State St Erie Pa
PENN-WRAPPER—Penn-Union Electric Corp
PENNDRILL—Pennsylvania Drilling Co
PENNLUGS—Penn-Union Electric Corp
PENNSBURG—Penn (Wm) Fluorescent Light Mfg Co
Pennsylvania Drilling Co Masonry Drill Div 1201 Banksville Rd Pittsburgh 16 Pa
Pennsylvania Transformer Co—see Pennsylvania Transformer Div
Pennsylvania Transformer Div McGraw-Edison Co Box 330 Canonsburg Pa
PENOLENE—Penetone Co
PENOTE—Cleveland Trencher Co
PENROSE—Northbrook Products Inc
PERECO—Pereny Equipment Co Inc
Pereny Equipment Co Inc Tri-Village Sta Columbus 12 Ohio
Pereny Pottery & Equipment Co—see Pereny Equipment Co Inc
PERFALUX—Lightolier Inc
Perfeclite Co 1457 E 40 St Cleveland 3 Ohio
Perfect-Line Mfg Corp Old Country Rd & Railroad Ave P O Box 65 Hicksville LI NY
PERFECTAIRE—Perfect-Line Mfg Corp
Perfection Industries Div Hupp Corp 1135 Ivanhoe Rd Cleveland 10 Ohio
Perfex Controls—see General Controls Co
Perkins Battery Co 214 Golden Lane New Oxford Pa
PERM-ALIGN—Cummins Portable Tool Div
PERMA-CODE—Brady (W H) Co
Perma-Line Corp P O Box 525 Middleboro Ky
Permacel U S Highway 1 New Brunswick NJ
Permacel-Lepage's Inc—see Permacel
PERMACOTE—Westinghouse Electric Corp Lamp Div
PERMAFLECTOR—Pittsburgh Reflector Co
PERMAFOAM—Columbia Wire & Supply Co
PERMALINE—Columbia Wire & Supply Co
PERMALINE—Line Material Industries
Permanent Magnet Co Inc 4437 Bragdon St Lawrence 26 Ind
PERMAPRENE—Hatfield Wire & Cable Div Continental Copper & Steel Industries Inc
PERMASEAL—Guardian Mfg Co
PERMI-CAL—Topflight Corp
Peschel Electronics Inc RFD #1 Patterson NY
Peters Mfg Co 162 Old Colony Ave Wollaston 70 Mass
PETITE—Westinghouse Electric Corp Lamp Div
PETRO-DURE—Phelps Dodge Copper Products Corp
Petter Diesel Engine Div Brush Aboe Inc 34-14 58th St Woodside 77 NY
Pfaff & Kendall 84 Foundry St Newark 5 NJ
Phalo Plastics Corp 530 Boston Turnpike Shrewsbury Mass
PHALON—Phalo Plastics Corp
PHANO-CHARGER—General Electric Co
PHAROS—Perfeclite Co
PHASE-ISOLATED—Pennsylvania Transformer Div
PHASE-GUARD—Stradley Engineering Co
PHASEFORMER—Eastern Specialty Co
PHAZGARD—Chronoflash Co
Phelps Dodge Copper Products Corp 300 Park Ave New York 22 NY
Phelps Fan Mfg 715 Thomas St Little Rock Ark
Phelps Mfg Co—see Phelps Fan Mfg Co
PHIL-TROL—Phillips Control Corp
Philadelphia Electrical & Mfg Co 1200-36 N 31 St Phila 21 Pa
PHILITE—Ruby-Philite Corp
Phillips (Oscar) Co 9701 Reading Rd (Box 21) Cincinnati 15 Ohio
Phillips Control Corp 59 W Washington St Joliet Ill
Phillips Drill Co U S 12 Michigan City Ind
Phillips Mfg Co Inc 8200 Grand Ave Minneapolis 20 Minn
PHOENIX—Commercialaire Corp of America
PHOENIX—Frigid Air
PHONETALARM—American District Telegraph Co
PHONOCALL—Faraday Inc
PHOSON—United Wire & Supply Corp
PHOSTUBE—All-State Welding Alloys Co Inc
PHOTO-TROLLER—Westinghouse Electric Corp
Photobell Co Inc 43 Vesey St New York 7 NY
Photomation Inc 96 S Washington Ave Bergenfield NJ
PHOTOMETRIC—Wakefield Lighting Div
PHOTOSWITCH—Electronics Corp of America
PIC—General Controls Co
PICK-OFF—Topflight Corp
PICOMA—Pipe Coupling Mfrs Inc
Pieper-Lillard Div Jasper Blackburn Corp 1525 Woodson Rd St Louis 14 Mo
PIER—Peer Inc
Pierce Renewable Fuses Inc Box F Leicester NY
PIERCEWAY—Massey (A H) Inc
PIGMAY—Capewell Mfg Co
PIN-GRIP—Star Expansion
PINCOR—Pioneer Gen-E-Motor Co
Pines Engineering Co Inc 601 Walnut St Aurora Ill
PINSPOT—Versen (Kurt) Co
PIOLITES—Wilson (J A) Lighting & Display Inc
Pioneer Gen-E-Motor Co 5841 W Dickens Ave Chicago 39 Ill
Pipe Coupling Mfrs Inc P O Box 488 Martins Ferry Ohio
PIPEMASTER—Erie Tool Works
Piqua Machine & Mfg Co 441 S College St Piqua Ohio
PIRAC—Electri-Cord Mfg Co Inc
PISTOL-GRIP—Anderson Electric Corp
Pitman Mfg Co Garner Ave & Duck Rd Grandview Mo
PITT—Thepitt Mfg Co
Pittsburgh Reflector Co Oliver Bldg Mellon Square Pittsburgh 22 Pa
Pittsburgh Standard Conduit Co James St Verona Pa
PLANPAK—Automatic Control Co
PLANTE—Gould-National Batteries Inc
PLANTMAN FLOORMOBILE—Handling Devices Co Inc
PLASCENE—Chester Cable Corp
PLAST-O-PRENE—Snyder (M L) & Son Inc
Plaster-Eye Co 2560 Noblestown Rd Pittsburgh 5 Pa
PLASTI-FLEX—Auburn Mfg Co
PLASTI-LUVR—Luminous Ceilings Inc
PLASTIBOND—Pittsburgh Standard Conduit Co
PLASTIC METAL—Onan (A L) Co Inc
Plastic Pioneers Inc—see Mastercraft Plastics Co Inc
Plastic Wire & Cable Corp E Main St Jewett City Conn
PLASTICLINER—Duro-Test Corp
PLASTICORD—Chester Cable Corp
PLASTICORE—Chester Cable Corp
PLASTICOTE—Chester Cable Corp
Plasticraft Inc—see Mastercraft Plastics Co Inc
PLASTILET—Sloane Mfg Co
PLASTILIFE—David's Gloves Inc
Plastiline Inc 1251 N E 48 St (P O Box 2023) Pompano Beach Fla
PLASTILITE—Metalcraft Products Co Inc
PLASTITE—Whitney Blake Co
Plastoid Corp 42-61 24th St LIC 1 NY
PLASTOLIER—Metalcraft Products Co Inc
PLASTONE—Co-operative Utilities Co Inc
PLEXI-TONE—Penn (Wm) Fluorescent Light Mfg Co
PLEXILUX—Sun-Lite Mfg Co
PLEXILITER—Duro-Test Corp
PLEXLUME—Gruber Bros Inc
PLEXOLINE—Day-Brite Lighting Inc
PLI-A-BAND—Memco Engineering & Mfg Co Inc
Plomb Tool Co—see Proto Tool Co
PLUG-IN—National Electric Div H K Porter Co
PLUG-IN—Square D Co
PLUG-N-CAPS—Jordan Industries Inc
PLUGMASTER—Sperti Faraday Inc
PLUGMOLD—Wiremold Co
PLUS PANEL—General Switch Co
Plymouth Rubber Co Inc 23 Revere St Canton Mass
PLYMOZONE—Plymouth Rubber Co Inc
PLYMPRENE—Plymouth Rubber Co Inc
PNEOLATOR—Mine Safety Appliances Co
PNEU-DRAULIC—Allis-Chalmers Mfg Co
POCKET-SIZE—Champion DeArment Tool Co
POCKETSCOPE—Waterman Products Co Inc
POLE-MASTER—Klein (Mathias) & Sons
POLE STAR—Pennsylvania Transformer Div
Poles Inc E 706 Sprague Ave Spokane 3 Wash
POLICARB—Driver (Wilbur B) Co
Polis Mfg Co—see Bulldog Div Gregory Industries Inc
Pollak (Joseph) Corp 81-95 Freeport St Boston 22 Mass
Pollak Luminescent Corp 1105 W Lawrence Ave Chicago 40 Ill
POLY-PLATE—Brady (W H) Co
POLY-V—Raybestos-Manhattan Inc
POLYDYNE—General Electric Co Apparatus Sales Div
POLYFLEX—Walker Brothers
Polyken Sales Div Kendall Co 309 W Jackson Blvd Chicago 6 Ill
Polymer Corp 2120 Fairmount Ave Reading Pa
Polymer Corp of Pa—see Polymer Corp
POLYPENCO—Polymer Corp
POLYRANGER—Sensitive Research Instrument Corp
Porcelain Products Co 224 N Patterson St Carey Ohio
Porcelain Products Inc—see Chance (A B) Co
PORT-A-PHONE—Feiler Engineering & Mfg Co
PORT-O-LARM—Kidde Ultrasonic & Detection Alarms Div
PORT-O-REEL—Industrial Electrical Works
PORT-O-VENT—Reed Unit-Fans Inc
PORTA-BAND—Porter-Cable Machine Co
PORTA DRIVE—Muncie Gear Works Inc
PORTA-FLEX—Gardner Products Co
PORTA-KALL—Loge Electronics Inc
PORTA-SIGNAL—Dryomatic Corp
Portable Light Co Inc 65 Passaic Ave Kearny NJ
PORTAIR—Coppus Engineering Corp
PORTALITE—Carpenter Mfg Co
Portalite Co—see Carpenter Mfg Co
Porter-Cable Machine Co 700 Marcellus St Syracuse 4 NY
Portland-Monson Slate Co 465 Congress St Portland 3 Me
PORTO—Hessel (W F) Co Inc
PORTO-MITE—Beaver Pipe Tools Inc
PORTO SYSTEM—Hessel (W F) Co Inc
Portomag Inc 1521 E Nine Mile Detroit 20 Mich
POS-E-FLEX—Thomas & Betts Co
POS-E-KON—Thomas & Betts Co
POSITECT—S & C Electric Co
POSITIVE SEAL—Allis-Chalmers Mfg Co
POSITROL—S & C Electric Co
Post Electronic Products 12 Lothrop St Beverly Mass
POST-LITE—Great Northern Mfg Corp
POSTLITE—Drake Mfg Co
POSTOP—Holophane Co Inc
POTLOK—General Controls Co
Potter & Brumfield Div American Machine and Foundry Co Princeton Ind
Potter & Brumfield Inc—see Potter & Brumfield Div
Potter & Rayfield Inc P O Box 1042 Atlanta Ga
POW-R-DRIVE—Wachs (EH) Co
POW-R-MATIC—Aero-Motive Mfg Co
POW-R-SPADE—Stampings Inc
POWACALL—Edwards Co Inc
Powder Power Tool Co—see Omark Industries Inc
POWDIRON—Bound Brook Bearing Corp of America
POWER-CAPSULE—Bogue Electric Mfg Co
POWER CHARGER—Fox Products Co
POWER CHIEF—Nordberg Mfg Co
POWER KING—Goodall Rubber Co
Power Line Fan Co Plainfield NJ
POWER-LUME—Wheeler Reflector Co
POWER-O-MATIC—Blue M Electric Co
Power Plants Inc—see U S Electric Motor Co
POWER STREAK—American Electric Cable Co
Power-Strut Div Van Huffel Products Inc Dietz Rd Warren Ohio
POWER-TRAN—Mid-States Welder Mfg Co
POWER VENT—Progress Mfg Co Inc
POWERBEL—Auth Electric Co Inc
POWERCON—Cornell-Dubilier Electric Corp

Powercraft Corp 2215 De Kalb St St Louis 4 Mo
POWERDUCT—Anaconda Wire & Cable Co
Powerdyne Inc 17150 Boones Ferry Rd Oswego Ore
POWEREEL—Industrial Electrical Works
POWERLOID—Guardian Electric Mfg Co
POWERLUME—Solar Light Mfg Co
POWERMASTER—Lewis-Shepard Products Inc
POWERMASTER—Oxwall Tool Co Ltd
POWERPLUG IN—Adam (Frank) Electric Co
POWERS-AMERICAN—McCabe-Powers Body Co
POWERSHOP—DeWalt Inc
POWERSTAT—Mercoid Corp
POWERSTAT—Superior Electric Co
POWERUPTER—Delta-Star Electric Div H K Porter Co Inc
POWR-CORD—Royal Electric Corp
POWR-PAK—Winpower Mfg Co
POWR PAKT—Alliance Mfg Co Inc
POWR-RIB—Ohmite Mfg Co
Powrex Switch Co 36 Pleasant St Watertown Mass
POXALLOY—Okun (A L) Co Inc
PRAYER LIGHT—Aerolux Lights Corp
PRE-MARX—Premax Products Div Chisholm-Ryder Co Inc
PRECIPTRON—Westinghouse Electric Corp Sturtevant Div
PRECISION-CHARGE—Lincoln Electric Co
Precision Thermometer & Instrument Co 1434 Brandywine St Philadelphia 30 Pa
Precision Transformer Corp 2483 Greenleaf Ave Elk Grove Village Ill
Precision Welder Mfg Co 2483 Greenleaf Ave Elk Grove Village Ill
PREENX—General Electric Co
Preformed Line Products Co 5349 St Clair Ave Cleveland 3 Ohio
Premax Products Div Chisholm-Ryder Co Inc College & Highland Aves Niagara Falls NY
Prepco Corp Edgerton Wis
PRES-SURE—Buchanan Electrical Products Corp
PRES-TO-HEAT—Triton Mfg Co Inc
Prescolite Mfg Corp 2229 Fourth St Berkeley 10 Calif
PRESIDENTIAL—Pittsburgh Reflector Co
PRESLOK—Prescolite Mfg Corp
PRESS LITES—Sun-Lite Mfg Co
PRESSURE-LOCK—General Electric Co
Pressure Products Corp—see Prepo Corp
PRESSURE-TITE—Metropolitan Electric Mfg Corp
PRESSWITCH—Hubbell (Harvey) Inc
PRESTEST—Cutler-Hammer Inc
PRESTIGE—Project Fixture Mfg Corp
PRESTO—Bogen-Presto Co
Presto Recording Corp—see Bogen-Presto Co
PREXLITE—Gruber Bros Inc
PRIBRO—Price Bros Inc
Price Bros Inc 4301 W Madison St Chicago 24 Ill
Price Electric Corp East Church & Second Sts Frederick Md
PRIDEL—Price Bros Inc
PRIDEX—Price Bros Inc
PRIMAX—Roche (Paul C) Co Inc
PRINCE—Yokogawa Electric Works Inc
PRINCE LITE—Rab Electric Mfg Co Inc
PRINCESS—Curtis Lighting Div
Principle Research & Development Corp 200 Citizens Bldg Aberdeen SD
PRINCO—Precision Thermometer & Instrument Co
Pringle Electrical Mfg Co 1900-1912 N Sixth St Philadelphia 22 Pa
PRISMACITE—Keystone Electric Mfg Co
PRISMALUX—Lightolier Inc
PRISMATIC—Wakefield Lighting Div
PRISMOID—Guth (Edwin F) Co
PROBOTROL—Automatic Control Co
PRODUCERLITE—Solar Light Mfg Co
Producers and Distributors Inc 1321 Hanover Ave Allentown Pa
PRODUCTIMETER—Durant Mfg Co
Production Planning Co—see Allen Cooler & Ventilator Inc
PROFILE—Lightolier Inc
PROGRAMONITOR—Counter & Control Corp
Progress Mfg Co Inc Castor Ave & Tulip St Phila 34 Pa
Project Fixture Mfg Corp 55 Ongley St Rockville Centre NY
PROJECTORAMA—Century Lighting Inc
PROMATIC—General Control Co
PROPELLAIR—Robbins & Myers Inc
PROTECT-O-VANE—Minneapolis-Honeywell Regulator Co Industrial Div
Protection Controls Inc 6000 N Legett Ave Chicago 46 Ill
PROTECTO-MASK—Mystik Adhesive Products Inc
PROTECTOGLO—Minneapolis-Honeywell Regulator Co Industrial Div
PROTECTROL—Automatic Control Co
PROTEX—Woodhead (Daniel) Co
PROTEXTUB—Eagle Electric Mfg Co Inc
Proto Tool Co Box 3519 Terminal Annex Los Angeles 54 Calif
PRY-LITE—Emerson-Pryne Co
Pucel Enterprises Inc 3746 Kelley Ave Cleveland 14 Ohio
PUL-LIFT—Yale & Towne Mfg Co
PULFLEX—Universal Metal Hose Co
PULFUZSWITCH—Adam (Frank) Electric Co
PULL-A-WAY—Wright Hoist Div
PULL-REEL—Narragansett Wire Co
Pullman Vacuum Cleaner Corp 25 Buick St Boston 15 Mass
PULSECOPE—Waterman Products Co Inc
PULSOLITE—Electronic Control Corp
PUMPTROL—Square D Co
PUNCHY—Curtis Lighting Div Curtis-All Brite Lighting Inc
PUR-AR-LITE—House-O-Lite Corp
Pure Carbon Co Inc 441 Hall Ave St Marys Pa
PUREBON—Pure Carbon Co Inc
PUREMET—Pure Carbon Co Inc
PURMA-DURE—Phelps Dodge Products Corp
PUSHBUTTON—White-Rodgers Co
PUSHMATIC—I-T-E Circuit Breaker Co BullDog Electric Products Div
Pyle-National Co 1344 N Kostner Ave Chicago 51 Ill
PYLE-O-FLEX—Pyle-National Co
PYLE-STAR-LINE—Pyle-National Co
PYLETS—Pyle-National Co
PYLON-LITE—Revere Electric Mfg Co
PYR-O-VANE—Minneapolis-Honeywell Regular Co Industrial Div
PYRALITE—Gruber Bros Inc
Pyramid Electric Co 1445 Hudson Blvd North Bergen NJ
Pyramid Instrument Corp—see Amprobe Instrument Corp
PYRANOL—General Electric Co
PYRATHERM—Mercoid Corp
PYREX—Corning Glass Works
PYRO—Pyrometer Instrument Co
PYROTEMP—Electronic Control Corp
PYROCAST—Pyrosil Inc
PYROCON—Illinois Testing Laboratories Inc
PYRODUR—Electra Insulation Corp
PYROLITE—Berko Electric Mfg Corp
Pyrometer Instrument Co Bergenfield NJ
Pyrosil Inc 1889 Front St Cuyahoga Falls Ohio

Q

Q-BESTON—Auburn Mfg Co
QHT—General Electric Co Apparatus Sales
QIKTAP—Burndy Corp
QO—Square D Co
QUAD—Quadrangle Mfg Co
QUADLITE—Mole-Richardson Co
Quadrangle Mfg Co 32 S Peoria St Chicago 7 Ill
QUADRILITE—Lightolier Inc
QUAKER—Lukens (Thos F) Metal Co
QUAKER—Snyder (M L) & Son Inc
Quaker City Electric Mfg Co 2810 E Pacific St Phila 34 Pa
QUAKER LITE—Quaker City Electric Mfg Co
Quartz Products Corp 688 Somerset St (P O Box 628) Plainfield NJ
Queen Gray Co—see Gray Instrument Co
Queen Products Co Inc Thirteenth & Rowan Sts Louisville 3 Ky
QUELARC—Pyle-National Co
QUICK-BILT—Frick-Gallagher Mfg Co
Quick Charge Div Little Giant Corp 3810 N Tulsa St Oklahoma City Okla
Quick Charge Inc—see Quick Charge Div Little Giant Corp
QUICK-CLEAN—Allis-Chalmers Mfg Co
QUICK-DRIVE—Omark Industries Inc
QUICK-LITE—New York Fluorescent Mfg Co Inc
QUICK-TROL—Nelson Electric Mfg Co
QUICK-WEDGE—Kedman Co
QUICKSTART—Marvel Lamp Co
QUICKWIRE—Cable Electric Products Inc
QUICKWIRE—Leviton Mfg Co Inc
QUIET AC—Leviton Mfg Co Inc
QUIET—Sierra Electric Corp
QUIET-LIGHT—Metalcraft Products Co Inc
Quigley Co Inc 415 Madison Ave New York 17 NY
Quijada Tool Co Inc—see Collins Machinery Corp
Quijada Tool Div—see Collins Machinery Corp
QUIK-HEAT—Clements Mfg Co
QUIK-LABEL—Brady (W H) Co
QUIK-LIFT—Coffing Hoist Div Duff-Norton Co
QUIK-LOC—Joy Mfg Co
QUIK-LOK—Eagle Electric Mfg Co Inc
QUIK-PLATE—Brady (W H) Co
QUIK-VAC—Clements Mfg Co
QUIKHETER—Adam (Frank) Electric Co
QUIKIT—Wells Mfg Corp
QUIKLUG—Burndy Corp
QUIKSITE—H-B Instrument Co
Quincy Elevator Gate Co—see Quincy Mfg Co
Quincy Mfg Co Box 916 Tiffin Ohio
QUINORGO—Johns-Manville
QUINTERRA—Johns-Manville
QUINTERRABORD—Johns-Manville
QUINTROL—Counter & Control Corp
QWIK-CHANGE—Square D Co
QWIK-OPEN—Square D Co

R

R-ASE—All-Steel Equipment Inc
R-B-M Controls Div Essex Wire Corp 131 Godfrey St Logansport Ind
RCA—Radio Corp of America
RCA WHIRLPOOL—Whirlpool Corp
RCD—Rotary Concrete Drill Co
RE—Reuland Electric Co
R & IE Equipment Div—see I-T-E Circuit Breaker Co
R-K—Ruggles-Klingemann Mfg Co
R/M—Raybestos-Manhattan Inc
R & M—Robbins & Myers Inc
R & M Hunter—see Hunter Div
RS—River Smelting & Refining Co
R/S—Refrigerating Specialties Co
RSPIV—Link-Belt Co
R T & E Co—see R T & E Corp
R T & E Corp 1900 East North St Waukesha Wis
Rab Electric Mfg Co Inc 605 E 132 St New York 54 NY
RABOLITE—Rab Electric Mfg Co Inc
Racine Electric Products—see Howard Industries Inc
RACO—All-Steel Equipment Inc
RACO—Railroad Accessories Corp
RAD-O-GLOW—Blue M Electric Co
RADARANGE—Raytheon Mfg Co
RADCOR—Wiegand (Edwin L) Co
RADECTOR—Jordan Electronics
RADELIN—United States Radium Corp
RADI-AIRE—Reynolds Electric Co
Radiant Lamp Corp 300 Jelliff Ave Newark 8 NJ
RADIANTGLASS—Allied Precision Industries
RADIASTAT—Ward Leonard Electric Co
Radio Corp of America Industrial Electronics Products Front & Cooper Sts Camden 2 NJ
Radio Frequency Laboratories Inc Boonton NJ
Radio Receptor Co Inc 240 Wythe Ave Brooklyn 11 NY
RADIOCARB—Driver (Wilbur B) Co
Radionic Transformer Co 411 S Sangamon St Chicago 7 Ill
RADIX—Versen (Kurt) Co
Radix Wire Co 26260 Lakeland Blvd Cleveland 32 Ohio
RADOR—Atlas Overhead Door Co
Rae Motor Corp Box 518 McHenry Ill
Railroad Accessories Corp Tenakill Park Cresskill NJ
RAKIT—Cope (T J) Div Rome Cable Corp
RAKSCOPE—Waterman Products Co Inc
Ralco Mfg Co 123-141 N Albany Ave Chicago 12 Ill
RAM—Diamond Expansion Bolt Co Inc
RAMAC—Rattan Mfg Co
Rambusch Decorating Co 40 W 13 St New York 11 NY
Ramco Mfg Co 540 Westfield Ave W Roselle Park NJ
Ramco Mfg & Engineering 5413 N E Columbia Blvd Portland Ore
Ramset Div—see Ramset Fastening System
Ramset Fastening System Winchester-Western Div Olin Mathieson Chemical Corp. 289 Winchester Ave New Haven 4 Conn
Ramset Fasteners Inc—see Ramset Fastening System
RANCH-AIRE—Cool-ette Inc
RANCH-VENT—Cool-ette Inc
RANCHO—Western Insulated Wire Co
RANCHOPRENE—Western Insulated Wire Co
Randall Graphite Bearings Inc Greenlawn & Lake Sts Lima Ohio
RANGE LUGS—Frankel Connector Co
RANGER—Day-Brite Lighting Inc
RANGESPLICES—Frankel Connector Co
RANGESTUD—Frankel Connector Co
RANGETAP—Frankel Connector Co
RAPAC—Square D Co
Rapid Electric Co Inc 2881 Middletown Rd Bronx 61 NY
Rapid Electroplating Process Inc 1414 S Wabash Ave Chicago 5 Ill
RATOLARM—Fischer & Porter Co
RATTAN—Benjamin Electric Mfg Co
Rattan Mfg Co 10 Wall St (P O Box 1745) New Haven 7 Conn
Rattray (George) & Co Inc 101 New South Rd Hicksville NY
Rauland-Borg Corp 3535 West Addison St Chicago 18 Ill
RAWL—Rawlplug Co Inc
RAWLDRILL—Rawlplug Co Inc
RAWLDRIVE—Rawlplug Co Inc
Rawlplug Co Inc 212 Petersville Rd New Rochelle NY
RAY-HEAT—Tennessee Plastics Inc
RAY-LINE—Portable Light Co Inc
RAY-LINE—Sireno Signal Mfg Co
RAY MAN—Raybestos-Manhattan Inc
RAY-O-CELL—Com-Pak-Ett Mfg Corp
Ray-O-Vac Co 212 E Washington Ave Madison 10 Wis
RAY-VEC—Electrend Products Corp
Raybestos-Manhattan Inc 61 Willett St Passaic NJ
Raydyne Corp 2715 S Fourth St (P O Box 1147) Springfield Ill
RAYESCENT—Westinghouse Electric Corp Lamp Div
Raytheon Mfg Co Commercial Apparatus & Systems Div 100 River St Waltham 54 Mass
RAYTRON—Rattray (George) & Co Inc
RAYWALL—Tennessee Plastics Inc
RE-CIRK-IT—Heinemann Electric Co
RE LUX—Versen (Kurt) Co
REACTODYNE—U S Electrical Motors Inc
REACTROL—General Electric Co
Reading Chain & Block Corp—see Reading Crane & Hoist Corp
Reading Crane & Hoist Corp 2100 Adams St Reading Pa
READY HEAT—Cox and Co Inc
Ready-Power Co 11231 Freud Ave Detroit 14 Mich
REALITE—Holophane Co Inc
REAM-RITE—Holub Industries Inc
REBALL—Versen (Kurt) Co
RECAL—Versen (Kurt) Co
RECO—Reynolds Electric Co
Recora Co Inc Powis Rd (Box 68) St Charles Ill
RECTI-FILTER—Raytheon Mfg Co
RECTICHARGER—Raytheon Mfg Co
RECTIRINGER—Raytheon Mfg Co

RECTODYNE—Christie Electric Corp
RECTOPOWER—Mallory (P R) & Co Inc
RECTOX—Westinghouse Electric Corp
RED ARROW—Lift Trucks Inc
RED BAND—Howell Electric Motors Co
RED CENTER—Klein (Mathias) & Sons
RED "D'"—Diamond Wire & Cable Co
RED-D-HEAT—Diamond Wire & Cable Corp
RED-D-PRENE—Diamond Wire & Cable Co
RED DOT—Mason (L E) Co
RED END—Simonds Saw and Steel Co
RED GIANT—Revolvator Co
RED HEAD—Phillips Drill Co
RED-LUX—Duro-Test Corp
Red Seal Electric Co 10307 Detroit Ave Cleveland 2 Ohio
RED SPOT—Wakefield Lighting Div
RED TANG—Simonds Saw and Steel Co
RED TOP—Bradley Semiconductor Corp
RED TOP—H B Instrument Co
RED-TOP—Helwig Carbon Products Inc
Redi-Bolt Inc 5334 Indianapolis Blvd East Chicago Ind
REDI-FAB—Barber-Greene Co
REDI-FLOW—Barber-Greene Co
REDI-HEAT—Knapp-Monarch Co
REDI-KORNERS—Stahlin Bros Inc
REDI-TEES—Stahlin Bros Inc
REDMOND—Cyclo-Freez Corp
Redmond Co Inc 201 Monroe St Owosso Mich
REDOME—Versen (Kurt) Co
REDTOP—Bradley Semiconductor Corp
Reed Unit-Fans Inc 501 N St Patrick St New Orleans La
REEL-O-MATIC—Columbia Products Inc
REELIFT—Hykon Mfg Co
REELITE—Appleton Electric Co
Rees (Mackworth G) Inc 1573 E Forest Ave Detroit 7 Mich
Reeve Electrical Co Inc 120 W 42nd St New York 36 NY
Reeve Electronics Inc 609 W Lake St Chicago 6 Ill
REEVELEC—Reeve Electronics Inc
Reeves Pulley Co—see Reeves Pulley Div Reliance Electric & Engineering Co
Reeves Pulley Div Reliance Electric & Engineering Co 1225 7th St Columbus Ind
REFLEX—Versen (Kurt) Co
REFRACTOLENS—Hollophane Co Inc
Refrigerating Specialties Co 3004 W Lexington St Chicago 12 Ill
REGAL-LITE—Sterner Industries
REGATRON—Electronic Measurements Co Inc
REGENT—Keystone Electric Mfg Co
REGOHM—Electric Regulator Corp
REGULA—Curtis Lighting Div Curtis-All Brite
REGULEX—Allis-Chalmers Mfg Co
REGULITE—Ward Leonard Electric Co
REGUTRON—Electric Machinery Mfg Co
Reichert Float and Mfg Co 2242 Smead Ave Toledo 6 Ohio
REIGNSEAL—Peters Mfg Co
REIGNSKIN—Peters Mfg Co
REJUST—Versen (Kurt) Co
RELAMPALITE—Prescolite Mfg Corp
RELAY-AMP—Goldak Co Inc
RELECTO—Appleton Electric Co
RELENS—Versen (Kurt) Co
RELIABLE—Standard Electric Co Inc
Reliable Battery Co—see Standard Electric Co Inc
RELIANCE—American Steel & Wire Div
RELIANCE—Trine Mfg Corp
Reliance Automatic Lighting Co—see Reliance Time Controls Inc
Reliance Electric & Engineering Co 24701 Euclid Ave Cleveland 17 Ohio
Reliance Time Controls Inc 1927 Mead St Racine Wis
RELOID—Guardian Electric Mfg Co
Relton Corp 99 N Lotus Ave (P O Box 5546) Pasadena Calif
Rembrandt Lamp Corp 4500 W Division St Chicago 51 Ill
REMCON—Amprobe Instrument Corp
Remington Corp Remington Air Conditioning Div Wiley St Auburn NY
Remington Arms Co Inc 939 Barnum Ave Bridgeport 2 Conn
REMOTAIRE—American-Standard
REMOTROL—Midwest Electric Products Inc
REMOTROL—Templeton Kenly & Co
RENAISSANCE—Globe Lighting Products Inc
RENEWATRON—Bussmann Mfg Div
REPAN—Versen (Kurt) Co
REPAR—Versen (Kurt) Co
Republic Creosoting Co 1615 Merchants Bank Bldg Indianapolis 4 Ind
Republic Steel Corp Steel and Tubes Div 224 E 131 St Cleveland 8 Ohio
RESISTOL—Collyer Insulated Wire Co
RESISTOYL—G & W Electric Specialty Co
RESISTRAC—Glastic Corp
RESLOPE—Versen (Kurt) Co
RESPOT—Versen (Kurt) Co
RETRACT-O-REEL—Appleton Electric Co
Reuland Electric Co 3001 W Mission Rd Alhambra Calif
Revere Copper & Brass Inc 230 Park Ave NY 17 NY
Revere Electric Mfg Co 7420 N Lehigh Ave Chicago 48 Ill
REVMASTER—Opad Electric Co
Revolvator Co 2000 86th St North Bergen New Jersey
REVOLVO—Frick-Gallagher Mfg Co
REVOLVO-RAY—Sireno Signal Mfg Co
REVOTROL—Acme Electric Corp
REVUE—Versen (Kurt) Co
REX—Air Controls Inc
REX—Chain Belt Co
REX—Code Corp
REX-AIRATE—Air Controls Inc
Rex Metal Craft Inc 1717 Gent St Indianapolis 2 Ind
REX-TUBE—Flexonics Corp
Rex Welder Co 1200 Milton St Benton Harbor Mich
Rex Welder Sale Co—see Universal Electric Sales Corp
REXSELEN—Knopp Inc
Reynolds Electric Co 3000 River Rd River Grove Ill
Reynolds Metals Co Richmond 18 Va
REZAK—Versen (Kurt) Co
Rheem Califone Corp 1020 N La Brea Ave Hollywood 38 Calif
Rhode Island Insulated Wire Co Inc 50 Burnham Ave Cranston RI
Rhodes (M H) Inc 30 Bartholomew Ave Hartford 6 Conn
RIBBON HEAT—Cox and Co Inc
Rich (Phil) Fan Mfg Co Inc 2900 Caroline Houston 4 Texas
Rich Lamp Mfg Co—see Stabrite Fluorescent Mfg Co
Richards (J R) Co P O Box 482 Carnegie Pa
Richards Mfg Co Ltd 152 Coit St Irvington NJ
Richards-Wilcox Mfg Co 150 Third St Aurora Ill
Richardson-Allen Corp 116-15 Fifteenth Ave College Point LI NY
RICHMOND—Miller Co
Ridge Tool Co 400 Clark St Elyria Ohio
RIDGID—Ridge Tool Co
RIDGOILR—Ridge Tool Co
Rieber (Frank) Inc—see Carlton Products Co
RIMSET—Penn Controls Inc
RINGCALL—Edwards Co Inc
Ringsdorf Carbon Corp Box 22 East McKeesport Pa
RIPFLEX—Hatfield Wire & Cable Div
Ripley Co Inc Factory St Middletown Conn
RISERTHERM—Mercoid Corp
Rite-O-Lite Co 308 E Washington Blvd Los Angeles Calif
RITEOHM—Ohmite Mfg Co
RITEWAY—Building Service Co
Rittenhouse Co Inc 68 East St Honeoye Falls New York
River Smelting & Refining Co 4195 Bradley Rd (P O Box 5755) Cleveland 1 Ohio
Riverside Mfg & Electrical Supply Co 10228 Michigan Ave Dearborn Mich
RO-TITE—Curtis Lighting Div
Robbins & Myers Inc 1345 Lagonda Ave Springfield Ohio
Robbins & Myers Inc Fan Div—see Hunter Div
Roberson Inc 1539 E 103 St Seattle 55 Wash
Roberson (L N) Co—see Roberson Inc
ROBERTA—House-O-Lite Corp
ROBERTSHAW—Fulton Sylphon Div
Robertson & Ruth 460 W Lake St Elmhurst Illinois
Robertson Transformer Co Thornton Road Blue Island Ill
ROBINTRONIC—Hewitt-Robins
ROBOT—Miller Harris Instrument Co
Robot Appliances Inc—see Robot Industries Inc
ROBOT-EYE—Heat Timer Corp
Robot Industries Inc 7041 Orchard St Dearborn Mich
ROBOTROL—Reliance Time Controls Inc
Robotron Corp 21300 W Eight Mile Rd Detroit 19 Mich
Roche (Paul C) Co Inc 11 Park Pl New York 7 NY
ROCK BRAND—Weiss Biheller Merchandise Corp
Rockbestos Products Corp—see Rockbestos Wire & Cable Co
Rockbestos Wire & Cable Co Nicoll and Canner Sts New Haven 4 Conn
ROCKER-GLO—Pass & Seymour Inc
ROCKET—Round (David) & Son Inc
Rocket Devices Corp—see Star Expansion
ROCKING CONTACT—Allis-Chalmers Mfg Co
Rodale Mfg Co Inc 6th & Minor Sts Emmaus Pa
RODAR—Driver (Wilbur B) Co
ROE PLASTIC—Roebling's (John A) Sons Corp
Roebling's (John A) Sons Corp 640 S Broad St Trenton 2 NJ
ROEBX—Roebling's (John A) Sons Corp
ROECLAD—Roebling's (John A) Sons Corp
ROECLAMP—Roebling's (John A) Sons Corp
ROECORD—Roebling's (John A) Sons Corp
ROECOZONE—Roebling's (John A) Sons Corp
ROEGLAS—Roebling's (John A) Sons Corp
ROEPRENE—Roebling's (John A) Sons Corp
ROESHEATH—Roebling's (John A) Sons Corp
ROETEMP—Roebling's (John A) Sons Corp
ROEVAR—Roebling's (John A) Sons Corp
ROEWELD—Roebling's (John A) Sons Corp
ROFLEX—Rome Cable Div of Alcoa
Rogers Electric Laboratories 2651 Shaker Rd Cleveland Heights 18 Ohio
Rol-Away Truck Co—see Rol-Away Truck Mfg Co Inc
Rol-Away Truck Mfg Co Inc 6143 S E Foster Rd Portland 6 Ore
ROL-TOE—Templeton Kenly Co
ROLARC—Federal Pacific Electric Co
ROLENE—Rome Cable Div of Alcoa
Roll-A-Reel Co 4630 Reading Rd Cincinnati 29 Ohio
Roller (Wm G) Inc 159 Liberty Ave Mineola NY
Roller-Smith Corp—see Federal Pacific Electric Co
Roller-Smith Inc—see Federal Pacific Electric Co
ROLLEREEL—Suttle Equipment Co
ROLLO-COLOR—Luxor Lighting Products Inc
Rollway Bearing Co Inc 541 Seymour St Syracuse 4 NY
ROLON—Rome Cable Div of Alcoa
ROMARINE—Rome Cable Div of Alcoa
Rome Cable Corp—see Rome Cable Div of Alcoa
Rome Cable Div of Alcoa 421 Ridge St Rome NY
ROME RIGID—Rome Cable Div of Alcoa
ROMEX—General Cable Corp
ROOM MATE—Ceilheat Inc
ROPRENE—Rome Cable Div of Alcoa
ROSEAL—Rome Cable Div of Alcoa
ROSINX—Dunton (MW) Co
Ross Operating Valve Co 120 E Golden Gate Ave Detroit 3 Mich
Rostan Corp 5660 59th St Maspeth 78 LI NY
ROTABIN—Frick-Gallagher Mfg Co
Rotary Concrete Drill Co 650 S Arroyo Parkway Pasadena 1 Calif
Roth Controls Inc Box 900 Evanston Ill
Roth Mfg Co—see Roth Controls Inc
Roto-Beam 1755-57 N Keeler Ave Chicago 39 Ill
ROTO-BIN-DICATOR—Bin-Dicator Co
ROTO-GLO—Pass & Seymour Inc
ROTO-GUARD—Bin-Dicator Co
ROTO-PUSH—Cutler-Hammer Inc
ROTO-STACKER—Crane Veyor Corp
ROTO STRIP—Neo-Ray Products Inc
ROTO TORK—Haydon (A W) Co
ROTO TROL—Healy-Ruff Co
ROTOBEAM—General Lighting Co
ROTOLECTOR—Kliegl Bros Universal Electric Stage Lighting Co Inc
ROTOLENS—Steber Mfg Co
ROTOMOTIVE—Jack & Heintz Div Siegler Corp
ROTOSPOT—Rambusch Decorating Co
ROTOTROL—Westinghouse Electric Corp
ROTRTWIST—Star Expansion
Round (David) & Son Inc Box 9557 Cleveland 39 Ohio
ROUND WOUND—Line Material Industries
ROV-A-LITE—Terado Co
ROYAL—Waveland Electric Co
Royal Electric Co Inc—see Royal Electric Corp
Royal Electric Corp 95 Grand Ave Pawtucket RI
Royal Electric Mfg Co 1122 E 87 St Chicago 19 Ill
ROYAL-NOARK—Royal Electric Corp
ROYALAG—Royal Electric Co
ROYALMATIC—Standard Electric Time Co
ROZONE—Rome Cable Div of Alcoa
RUBBER COAT—Wilbur Williams Co
RUBBON SOLDER—All-State Welding Alloys Co Inc
Ruberoid Co 500 Fifth Ave New York 36 NY
RUBRES—Co-operative Utilities Co Inc
RUBRGLAS-SEEL—APM Corp
RUBRITE—Co-operative Utilities Co Inc
Ruby Chemical Co 68-70 McDowell St (P O Box 1108) Columbus 16 Ohio
Ruby Lighting Corp—see Lighting Dynamics Inc
Ruby-Philite Corp 32-02 Queens Blvd Long Island City 1 NY
RUBYFLUID—Ruby Chemical Co
RUCCO—Ruby Chemical Co
Ruggles-Klingemann Mfg Co Foster Court Salem Mass
RUNABOUT—Barber-Greene Co
RUPTAIR—Allis-Chalmers Mfg Co
RUPTOR—Allis-Chalmers Mfg Co
RUR-A-LINE—Plastic Wire & Cable Corp
RURALAY—General Cable Corp
Rusgreen Mfg Co 14262 Birwood Ave Detroit 38 Mich
Rush Wire Stripper Div Eraser Co Inc 1068 S Clinton St Syracuse 4 NY
Russell & Stoll Co Inc 125 Barclay St NY 7 NY
Rust-Oleum Corp 2425 Oakton St Evanston Ill
RUST SHIELD—Wilbur & Williams Co
RUSTBOND—Carboline Co
RUSTICLITE—Gruber Bros Inc
Ryther Purdy Lumber Co Inc 501 Tiffany St New York 59 NY

S

S & C Electric Co 4435 Ravenswood Ave Chicago 40 Ill
SCBCO—Southern Carbon Brush Co Inc
SCP—Superior Carbon Products Co
SCR DIMMER—Kliegl Bros Universal Electric Stage Lighting Co Inc
S I—Superior Insulating Tape Co
SIE—Southwestern Industrial Electronics Co
SKF Industries Inc Front St & Erie Ave Phila 32 Pa
SMC—St Marys Carbon Co
SPCO—Superior Porcelain Co
S & R—Sherman & Reilly Inc
SVEA—Swedish Iron & Steel Corp
S-Y BONDEZE—Phelps Dodge Copper Products Corp
SA-FUSE—Electric Machinery Mfg Co
SABER-TOOTH—Rawlplug Co Inc
SABRE—Miller Co
SAF-FLEX—Starrett (L S) Co
SAF-KEY—Electric Distribution Products Inc
SAF-T-AIR—United Electric Motor Co
SAF-T-ARC—Russell & Stoll Co Inc
SAF-T-GRIP—Miller Equipment Co Inc
SAF-T-LOK—Belt Electric Co
Safa Alarm Div Inc—see Fyr-Fyter Co Engineered Systems Div
SAFARI—Benjamin Electric Mfg Co
SAFE-FLEX—Starrett (L S) Co
SAFE-T-BEAM—Westinghouse Electric Corp Lamp Div
SAFE-T-CLIP—Industrial Devices Inc

SAFE-T-GLOW—Brach Mfg Co
SAFE-T-KOOL—Active Specialty Co
Safe-T-Mike Corp 2904 Chapman Oakland 1 Calif
SAFE-T-SEALS—Misener Mfg Co Inc
SAFE-T-TAP—Keystone Mfg Co
SAFECOTE—National Electric Div—H K Porter Co
SAFECOTE—Roebling's (John A) Sons Corp
SAFETECH—Capewell Mfg Co
Safety Belt-Lacer Co—see Armstrong-Bray & Co
Safety Car Heating Corp—see Safety Electrical Equipment Corp
SAFETY-GLO—Rodale Mfg Co Inc
Safety Industries—see Safety Electrical Equipment Corp
Safety Live Line Tool Co 973 86th Ave Oakland 21 Calif
SAFETY MI—General Cable Corp
SAFETY PULL—Coffing Hoist Div
SAFETY-VALVE—Bussmann Mfg Div
SAFETY YELLOW—Woodhead (Daniel) Co
SAFETYBREAKER—Cutler-Hammer Inc
SAFEWAY—American Pulley Co
SAFEWAY—Safety Live Line Tool Co
SAFEWAY—Woodhead (Daniel) Co
SAFEWAY—Wright Hoist Div
Safeway Heat Elements Inc Middlefield St (P O Box 1109) Middletown Conn
Safeway Steel Products Inc 6228 W State St Milwaukee 13 Wis
SAFLEX—Square D Co
SAFPATCH—Kliegl Bros
SAFREEN—Duro-Test Corp
SAFRONT—Square D Co
SAFTEST—Fleron (M M) & Son
SAFWAY-ALDEK—Safway Steel Products Inc
St Louis Brass Co—see Guth (Edwin F) Co
St Louis Malleable Casting Co 7701 N Conduit Ave St Louis 15 Mo
St Marys Carbon Co State St St Marys Pa
Sair Corp 9802 Euclid Ave Cleveland 6 Ohio
Salem Tool Co 767 S Ellsworth Ave Salem Ohio
SALI—Adalet Mfg Co
SAMSON—Couch (SH) Co Inc
SAMSON—Metalcraft Products Co Inc
SAND-SCOTT—Holub Industries Inc
Sanford Miller Co Inc 11 Lynch St Brooklyn 11 NY
Sangamo Electric Co 11th & Converse Springfield Ill
Sargent Electric Corp 630 Merrick Rd Lynbrook NY
Sasgen Derrick Co 3101 Grand Ave Chicago Ill
SAT-O-LITE—House-O-Lite Corp
SATELLITE—Prescolite Mfg Corp
SATELLUME—Ainsworth Lighting Inc
SATI-LITE—Electric Service Systems Inc
Sauereisen Cements Co 1045 N Canal St Pittsburgh 15 Pa
Save Lamp Corp—see Penetray Corp
SAW-GUN—Mid-States Welder Mfg Co
SAWZALL—Milwaukee Electric Tool Corp
SAXON—Benjamin Electric Mfg Co
Saxonburg Ceramics Inc PO Box 157 Saxonburg Pa
Saylor Electric Products Corp 277 Pierce St Birmingham Mich
SAYLORDUCT—Saylor Electric Products Corp
Scaico Controls Inc PO Box 41 Delanco NJ
SCALLOP-CEL—Neo-Ray Products Inc
Scam Instrument Corp 3101 N Lowell Ave Chicago 41 Ill
Scharff (JF) Inc—see Kidde Ultrasonic & Detection Alarms Div
Schauer Machine Co—see Schauer Mfg Corp
Schauer Mfg Corp 4500 Alpine Ave Cincinnati 42 Ohio
Schenectady Varnish Co Inc Congress & 9th Sts Schenectady 1 NY
SCHOOLMASTER—Great Northern Mfg Corp
Schweitzer & Conrad Inc—see S & C Electric Co
Sciaky Bros Inc 4915 W 67 St Chicago 38 Ill
Scientific Electric Inc 105-109 Monroe St Garfield NJ
SCINTAGUN—Goldak Co Inc
SCOOT-LITE—Woodward Machine Co
SCOPE—Stromberg Div General Time Corp
SCOTCH—Minnesota Mining & Mfg Co
SCOTCHCAST—Minnesota Mining & Mfg Co
SCOTCHFIL—Minnesota Mining & Mfg Co
SCOTCHKOTE—Minnesota Mining & Mfg Co
SCOTCHLOK—Minnesota Mining & Mfg Co
SCOTCHTITE—Minnesota Mining & Mfg Co
Scott (H H) Inc 111 Powder Mill Rd Maynard Mass
Scott (Hermon Hosmer) Inc—see Scott (H H) Inc
SCOTTY—Shure Mfg Corp
SCRANTON—Cellomatic Battery Corp
Scranton Aluminum Mfg Co 419 S Wyoming Ave Scranton Pa
Scranton Cellomatic Battery Corp—see Cellomatic Battery Corp
Scranton Storage Battery Corp—see Cellomatic Battery Corp
Scrayco Level Controls—see Scrayco Mfg Co
Scrayco Mfg Co 201 Greene Ave Middlesex NJ
SCRU-ITS—Solar Electric Corp
SCRU-LEADS—Rawlplug Co Inc
SCRU-TITE—Mastercraft Plastics Co Inc
SCRU-TITE—Myers Electric Products Inc
Scruggs (Lloyd) Co—see Howard Industries Inc
SCRUIN—Star Expansion
SCRULUG—Burndy Corp
SCULPTURAMA—Sunbeam Lighting Co
SEA BREEZE—Emerson Electric Mfg Co
SEA FOAM—Tevco Insulated Wire
Seaboard Products Corp Electric Heating Div 191 Frelinghuysen Ave Newark NJ
Seager Standard Carbon Co 291 Church St New York 13 NY
SEAL THRU—Eliza Metal Products Co
SEALED TIGHT—Royal Electric Corp
SEALFLEX—Universal Metal Hose Co
SEALNUT—Radio Frequency Laboratories Inc
SEALSTIX—Central Scientific Co
SEALTITE—Anaconda Metal Hose Div
SECONEC—Rusgreen Mfg Co
SECOVAR—Sangamo Electric Co
SECURITY—United States Rubber Co
Security Insert Co 1300 Arch St Phila 7 Pa
Security Lightning Rod Co—see Security Mfg & Contracting Co
Security Mfg & Contracting Co 606-612 Pine St Burlington Wis
SECURITYFLEX—Anaconda Wire & Cable Co
SEECO—Southern Electrical Equipment Co
Seeger-Williams Inc 4 Norman St Bridgeport 5 Conn
SEELBOLT—APM Corp
SEELRIVIT—APM Corp
SEELSKREW—APM Corp
SEELUX—Guth (Edwin F) Co
Seely Instrument Co Inc 377 Fourth St (P O Box 387) Niagara Falls NY
Segil (L J) Co 2500 W North Ave Chicago 47 Ill
SELCO—Sell (H H) Electric Co
SELCO—Spies Electric Works
SELECT-A-SPEDE—Allis (Louis) Co
SELECT-AMP—Moloney Electric Co
SELECT-O-MATIC—Feiler Engineering & Mfg Co
SELECTROL—Electro Dynamic Div General Dynamics Corp
SELECTRON—Electro Dynamic Div General Dynamics Corp
SELEKTA—Associated American Winding Machines Inc
SELENIBRAKE—American Rectifier Corp
SELINICHARGER—American Rectifier Corp
SELENIDRIVE—American Rectifier Corp
SELENIFIER—American Rectifier Corp
SELENIVAC—American Rectifier Corp
SELF-CHECKING—Sensitive Research Instrument Corp
Self-Lifting Piano Truck Co 423 N Main St Findlay Ohio
SELFDRIL—Star Expansion
SELFLUBE—Keystone Carbon Co Inc
Sell (H H) Electric Co 3240 Dakota Ave Minneapolis 16 Minn
SELPO—Self-Lifting Piano Truck Co
SENIOR—Linemaster Switch Corp
Sensitive Research Instrument Corp 310 Main St New Rochelle NY
SENTINEL—Ellenco Inc
SENTINEL—Portable Light Co Inc
SENTRY-LITE—Cellomatic Battery Corp
Sentry-Lite & Battery Div Hobby & Brown Electronic Corp 237 Sunrise Highway Rockville Centre NY
SEPCO—Steel Electric Products Co Inc
SEPRABLE—Appleton Electric Co
SEQUENSTART—Sola Electric Div
Sequoia Process Corp—see Sequoia Wire & Cable
Sequoia Wire & Cable Co 2201 Bay Rd (P O Box 1007) Redwood City Calif
SERV-EN—Kearney (James R) Corp
SERVICE BUGS—Frankel Connector Co
SERVICE LITER—Revere Electric Mfg Co
SERVICE-MASTER—McCabe-Powers Body Co
SERVICESPOOL—Alpha Wire Corp
SERVISAFE—Thompson Electric Co
SERVISLEEV—Hubbard & Co
SERVIT—Burndy Corp
Servospeed Div Electro Devices Inc 4 Godwin Ave Paterson NJ
SESAME—Alliance Mfg Co Inc
SETITE—US Expansion Bolt Co
Seton Name Plate Co Inc 50 Fitch St New Haven 15 Conn
Seyler Mfg Co—see Chance (AB) Co
SHAFTMOUNT—U S Electrical Motors Inc
Shalda Mfg Co Inc 156 W Providencia Ave Burbank Calif
Shallcross Controls Inc 2217-21 N 31 St Milwaukee 8 Wis
Shallcross Mfg Co Preston St Selma NC
SHALLOBEAM—Sunbeam Lighting Co
SHALLORAMA—Sunbeam Lighting Co
SHALLOW-LINE—Benjamin Division Thomas Industries
Shaw-Box Crane & Hoist Div Manning Maxwell & Moore Inc Muskegon Mich
Shaw-Perkins Mfg Co 201 E Carson St Pittsburgh 19 Pa
SHAWMUT—Chase-Shawmut Co
SHEETFLEXTOS—Keasbey & Mattison Co
Shelby Electric Inc East US Highway #421 Shelbyville Ind
Shenango Furance Co Centrifugally Cast Products Div West Third St Dover Ohio
Shenango Penn Mold Co—see Shenango Furnace Co
SHERARDUCT—National Electric Div
Sherman Industrial Electronics Div of Engineering Design Inc 108 N Gill St State College Pa
Sherman (H B) Mfg Co 22 Barney Battle Creek Mich
Sherman & Reilly Inc 1 Broad St Chattanooga 2 Tenn
Sherwin-Williams Co 101 Prospect Ave NW Cleveland 1 Ohio
SHIELD-ARC—Lincoln Electric Co
SHIPMASTER—Lewis-Shepard Products Inc
SHOCK PROOF—Industrial Transformer Corp
Shock-Rite Electric Fence Co—see Electric Service Systems Inc
SHOCK-STOPS—Connecticut Hard Rubber Co
SHOK-ABSORBER—Royal Electric Corp
SHOK-PRUF—Cable Electric Products Inc
SHOKLESS—Kneisley Electric Co
SHOP-CADDY—Allied Mfg & Sales Co
SHOP KING—Precision Welder Mfg Co
SHOPLIFTER—Economy Engineering Co
SHORTY—Black & Decker Mfg Co
SHOVELITE—Rambusch Decorating Co
Shox-Stok Inc Wellington Ohio
Shrader (FW) Co 11623 S Broadway Los Angeles 61 Calif
Shreveport Engineering Co—see Bar-Brook Mfg Co Inc
Shuford Mills Inc P O Drawer 340 Hickory NC
SHUR-CODE—Westline Products Div
SHUR-FLO—Hays Mfg Co
SHUR-MOUNT—Swivelier Co Inc
SHURE DRIVE—Ramset Fastening System
Shure Mfg Corp 1601 S Hanley Rd St Louis Mo
SHURE SET—Ramset Fastening System
SHURFLO—Anchor Metal Co Inc
Shurite Meters 130 Wallace St New Haven 8 Conn
SHURLOK—Pass & Seymour Inc
SHURTAPE—Shurford Mills Inc
SHUT-O-VENT—Reed Unit-Fans Inc
SHUTLBRAK—Adam (Frank) Electric Co
SIAMESE—Bradley Semiconductor Corp
SIANOR—Pucel Enterprises Inc
SIDALARM—Newark District Telegraph Co
SIDE-O-RAY—Duray Fluorescent Mfg Co
Siebring Mfg Co George Iowa
SIECO—Sherman Industrial Electronics Div
Siegler Corp Magnetic Amplifiers Div 632 Tinton Ave New York 55 NY
SIEMARC—Southwestern Industrial Electronics Co
SIERRA-BIPLEX—Sierra Electric Corp
Sierra Electric & Mfg Co—see Sierra Electric Corp
Sierra Electric Corp 15100 S Figueroa (P O Box 85) Gardena Calif
SIERRA-LOK—Sierra Electric Corp
SIERRA-TEX—Sierra Electric Corp
SIERRA-TRIPLEX—Sierra Electric Corp
SIERRALITE—Sierra Electric Corp
SIERRAPLEX—Sierra Electric Corp
SIERRAWARE—Sierra Electric Corp
SIGHTLINE—Sunbeam Lighting Co
SIGHTMASTER—Art Specialty Co
SIGHTMASTER—Flexo International Corp
SIGHTRON—Lightolier Inc
SIGMA—Wakefield Lighting Div
SIGNA-GLOW—Industrial Development Labs Inc
Signal Electric Div King-Seeley Corp 1800 13th St Menominee Mich
Signal Electric Mfg Co—see Signal Electric Div
Signal Engineering & Mfg Co—see Wheelock Signals Inc
SIGNAL MAT—Patrick & Wilkins Co
Signalite Fuse Co—see Signalite Inc
Signalite Inc 37-41 Neptune Highway Neptune NJ
SIGNALMASTER—Goldak Co Inc
Signet Controls 3205 S E 13th Ave Portland 2 Ore
SIL-ATRAN—Mid-States Welder Mfg Co
SIL-BES—Electro-Technical Products Div
SIL BOND—United Wire & Supply Corp
SIL FLUX—United Wire & Supply Corp
SIL-I-TRAN—Mid-States Welder Mfg Co
SILASTIC—Dow Corning Corp
SILCAD—Yardney Electric Corp
SILCOBEST—Silicone Insulation Inc
SILCONIC—Gould-National Batteries Inc
SILENT—Leviton Mfg Co Inc
Silent Hoist & Crane Co 841 63rd St Brooklyn 20 NY
SILENT-KING—Cable Electric Products Inc
SILIC-O-NETIC—Heinemann Electric Co
Silicone Insulation Inc 1383 Seabury Ave Bronx 61 NY
SILICONIC—Willard Storage Battery Div
SILOTEX—Anaconda Wire & Cable Co
SILTUBE—All-State Welding Alloys Co Inc
SILV-A-FLEX—Plastic Wire & Cable Corp
SILVER BEAUTY—Triple-A Specialty Co
SILVER DOT—Silvray Lighting Inc
SILVER KING—Arro Expansion Bolt Co
SILVER KING—General Control Co
SILVER LABEL—Dunton (MW) Co
SILVER SPOT—Silvray Lighting Inc
SILVERCEL—Yardney Electric Corp
SILVERFLEX—Electra Insulation Corp
SILVERLINE—Thor Power Tool Co
SILVERLINER—Westinghouse Electric Corp
SILVERSLICK—Republic Steel Corp
Silvey Pipe Bender Co 2215 Brighton Ave Kansas City 27 Mo
Silvray Lighting Inc 100 Main St Bound Brook NJ
SIMCONEX—Simplex Wire & Cable Co
Simes Co Inc 114 15th Ave College Point LI NY
Simmonds Aerocessories Inc—see Simmonds Precision Products Inc
Simmonds Precision Products Inc Tarrytown NY
Simonds Saw and Steel Co 470 Main St Fitchburg Mass
Simonski (G S) Co—see Lucifer Furnaces Inc
SIMPLEX—Templeton Kenly & Co
SIMPLEX—Weiss & Biheller Merchandise Corp
Simplex Co Inc 1139-41 N MacArthur Blvd Springfield Ill
Simplex Time Recorder Co 24 S Lincoln St Gardner Mass
Simplex Wire & Cable Co 79 Sidney St Cambridge 39 Mass
SIMPLYTROL—Assembly Products Inc
Simpson Co 1470 Doolittle Dr San Leandro Calif
Simpson Electric Co 5200 W Kinzie St Chicago 44 Ill
Simpson (Mark) Mfg Co Inc 32-28 49th St Long Island City 3 NY
Simpson Screen Co—see Simpson Co
SIOUX—Albertson & Co Inc
SIRENO—Portable Light Co Inc
Sireno Co Inc—see Sireno Signal Mfg Co
Sireno Signal Mfg Co 65 Passaic Ave Kearny NJ
SISCO—Swedish Iron & Steel Corp
Sittler Corp 18 N Ada St Chicago 7 Ill
60th ANNIVERSARY—Garcy Lighting Div

SKANDIA—Eagle Mfg Co
SKEDOODLE—Reynolds Electric Co
Skil Corp 5033 Elston Ave Chicago 30 Ill
SKILDRILL—Shallcross Controls Inc
SKILSAW—Skil Corp
SKILSAW—Shallcross Controls Inc
Skilsaw Inc—see Skil Corp
Skinner Chuck Co—see Skinner Precision Industries Inc Skinner Electric Valve Div
Skinner Precision Industries Inc Skinner Electric Valve Div 95 Edgewood Ave New Britain Conn
SKIP TOOTH—Nye Tool Co
SKULLGARD—Mine Safety Appliances Co
SKY-BLAST—Robbins & Myers Inc
SKY/LUX—Curtis Lighting Div Curtis-All Brite
SKY-RIDE—Allied Mfg & Sales Co
SKY STREAK—American Electric Cable Co
SKY-TIE—Adalet Mfg Co
SKY-VENT—Buffalo Forge Co
SKYCEIL—Silvray Lighting Inc
SKYDOME—Nemco Electric Co
SKYLIFT—Automatic Transportation Co
SKYLIKE—Silvray Lighting Inc
SKYLINE—Arex Co
SKYLINER—Electro Lighting Co
SKYLITE—Mole-Richardson Co
SKYLOUVER—Electro Lighting Co
SKYLUME—Electro Lighting Co
SKYRAY—Electro Lighting Co
SKYSECTOR—Silvray Lighting Inc
Skyworker Corp—see United States Air Conditioning Corp
Skyworker Div Emhart Mfg Co—see United States Air Conditioning Corp
Slater Appliances Inc—see Slater Electric & Mfg Co Inc
Slater Electric & Mfg Co Inc 45 Sea Cliff Ave Glen Cove NY
Slater Electronics Inc—see Slater Electric & Mfg Co
Slaughter Co College & Young Sts Piqua 5 Ohio
SLEIGH-O-LITE—Cable Electric Products Inc
SLIMFIN—Tuttle & Kift Inc
SLIMFLUX—Guth (Edwin F) Co
SLIPKNOT—Plymouth Rubber Co Inc
SLO-LAG—Eagle Electric Mfg Co Inc
SLO-SYN—Superior Electric Co
Sloane Mfg Co 7606 N Clybourn Ave Sun Valley Calif
SLUGIN—Star Expansion
SLUMBER GLO—Rodale Mfg Co Inc
Small Motors Inc 2076 Elston Ave Chicago 14 Ill
SMALL TALK—Simpson (Mark) Mfg Co Inc
SMITH DOLAND—Electric Arc Inc
Smith & Dove Mfg Co—see Ludlow Mfg & Sales Co
Smith-Gates Corp Farmington Conn
Smith (F A) Mfg Co—see Fasco Industries
Smith Welding Equipment Corp 2633 4th St SE Mineapolis 14 Minn
Smithcraft Corp 217 Everett Ave Chelsea 50 Mass
Smithcraft Lighting—see Smithcraft Corp
SMOKE-EYE—Heat Timer Corp
Smoot-Holman Co 321 N Eucalyptus Ave (P O Box 4097) Inglewood Calif
SMOOTH JAW—Champion DeArment Tool Co
SMOOTHCOTE—All-State Welding Alloys Co Inc
SMOOTHIE—Circle F Mfg Co
SNAKE CHARMER—Barth Corp
SNAKE LEADER—Burbank Electrical Products
SNAP-IN—Reichert Float & Mfg Co
SNAP-ON—Tomic Sales & Engineering Co
Snap-on-Tools Corp 8028 28th Ave Kenosha Wis
SNAP-STRAPS—Blackhawk Industries
SNAPEE—Woodhead (Daniel) Co
SNAPICOIL—Wiremold Co
SNAPIN—Star Expansion
SNAPIT—Cable Electric Products Inc
SNAPLOX—Benjamin Division Thomas Industries Inc
SNO-FLAKE—Curtis Lighting Div
SNO-MELTER—Easy-Heat Inc
SNORKEL—Nemco Electric Co
SNOWLITE—Luxor Lighting Products Inc
SNUB-SEAT—Anderson Electric Corp
SNUGFIT—Paine Co
Snyder (M L) & Son Inc 1897 E York St Philadelphia 25 Pa
So-Cal Electro Products Inc 4423 W Jefferson Blvd Los Angeles 16 Calif
Soapstone Co—see Soapstone Duct Co
Soapstone Duct Co 3985 Beach St Oakland Calif
SOCKET CINCHER—Kees (F D) Mfg Co
SODERTITE—G & W Electric Specialty Co
Sola Electric Div Basic Products Corp 1719 Busse Rd Elk Grove Ill
Solar Electric Corp 121 Central Ave Warren Pa
Solar Light Mfg Co 400 North Ashland Chicago 22 Ill
SOLARLITE—Solar Light Mfg Co
SOLARSPOT—Mole-Richardson Co
SOLAVOLT—Sola Electric Div
SOLDERALL—Brach Mfg Co
SOLDEREZE—Phelps Dodge Copper Products Corp
SOLDERMASTER—Hexacon Electric Co
SOLDERUX—Mico Instrument Co
Solux Corp 58-17 28th Ave Woodside 77 LI New York
SOLVO-STAT—Hoyt Mfg Corp
SONALARM—Scott (H H) Inc
Sonotone Corp Elmsford NY
Soreng Div—see Control Co of America
Sorensen & Co Richards Ave South Norwalk Conn
Sorgel Electric Co 838B W National Ave Milwaukee 4 Wis
Sorgel Transformer Co—see Sorgel Electric Co
Sound Equipment Corp—see Kwikheat Mfg Co
SOUND GUARD—Progress Mfg Co Inc
South River Metal Products Co Inc 377 Turnpike South River NJ
Southco Div South Chester Corp Lester Pa
Southeast Lighting Inc 521 E 20 St Charlotte 1 NC
Southern Carbon Brush Co Inc 7 18th St SW (P O Box 1710) Birmingham 1 Ala
Southern Electrical Co—see Olin Conductors
Southern Electrical Equipment Co 308 W Bland at Mint St Charlotte 3 NC
Southwestern Industrial Electronics Co 10201 Westheimer (P O Box 22187) Houston 27 Tex
Southwire Co Carrollton Ga
SOVEREIGN—Miller Co
SPACE LITER—Sun-Lite Mfg Co
SPACE SAVER—Hyster Co
SPACEGRID—Ainsworth Lighting Inc
SPACELITER—Steber Div Pyle-National Co
SPACEMASTER—Lewis-Shepard Products Inc
SPACIALITE—Ainsworth Lighting Inc
SPANG—National Supply Div Armco Steel Corp
Spang-Chalfant Div—see Cope (T J) Div
Spang-Chalfant Div—see National Supply Div Armco Steel Corp
SPANGLEAM—National Supply Div Armco Steel Corp
SPANTAP—Burndy Corp
Spartan Electric Radiator Corp 52-55 74th St Maspeth 78 NY
SPATIALITE—Manning (R A) Co Inc
SPATTERPROOF—Radiant Lamp Corp
Spaulding Fibre Co Inc 310 Wheeler St Tonawanda NY
SPAULDITE—Spaulding Fibre Co Inc
SPAULDO—Spaulding Fibre Co Inc
SPEAR—Jordan Co
Specialties Inc 2936 Sacramento St Pittsburgh 4 Pa
SPECTROLUX—Luxor Lighting Products Inc
SPEED BAND—Capewell Mfg Co
SPEED CUT—Beaver Pipe Tools Inc
SPEED-KING—Beaver Pipe Tools Inc
SPEED-LINE—Garcy Lighting Div Garden City Plating & Mfg Co
SPEED-LOK—Cable Electric Products Inc
SPEED MEASURE—Waldman (John J) Co
SPEED-O-MATIC—Beaver Pipe Tools Inc
SPEED SPIRAL—Super Tool Co
SPEED THRU—Mercury Hydraulics Inc
SPEEDAIRE—Dayton Electric Mfg Co
Speedex Mfg Co 418 S Wyman St Roxford Illinois
SPEEDI NO-BOLT—Tomic Sales & Engineering Co
SPEEDMASTER—Accurate Engineering Co
SPEEDMASTER—Lewis-Shepard Products Inc
SPEEDNAIL—Allmetal Engineering Inc
SPEEDOLET—Killark Electric Mfg Co
SPEEDOMAX—Leeds & Northrup Co
SPEEDRANGERS—Master Electric Div Reliance Electric & Engineering Co
SPEEDSAW—Thor Power Tool Co
SPEEDTOOLS—Thor Power Tool Co
SPEEDWAY—Wright Hoist Div
SPEEDWIRE—Slater Electric & Mfg Co Inc
Spencer Industries 1508 N Mascher St Phila 22 Pa
Spencer Studios—see Spencer Industries
Spencer Thermostat Div Metals & Controls Corp—see Metals & Controls Inc
Spencer Turbine Co 486 New Park Ave Hartford 6 Conn
Spero Electric Corp 20500 St Clair Ave Cleveland 17 Ohio
Sperti Faraday Inc—see Faraday Inc
SPHERE—Versen (Kurt) Co
SPHEROLITE—Line Material Industries
Spies Electric Works 564 W Van Buren St Chicago 7 Ill
SPINFAST—Scranton Storage Battery Corp
SPIRAFIL—Phelps Dodge Copper Products Corp
SPIRAFLEX—General Insulated Wire Works
SPIRAKORE—General Electric Co
SPIRAL-DRIVE—Arro Expansion Bolt Co
SPIRAL WRAP—Illumitronic Engineering Corp
SPIRALOK—American Metal Moulding Co
SPIRALON—Surprenant Mfg Co
SPLAC—Westline Products Div
SPLICIT—Burndy Corp
SPOOLARC—All-State Welding Alloys Co Inc
SPORTLITE—Duro-Test Corp
SPORTO—Appleton Electric Co
SPORTOFLOOD—Appleton Electric Co
SPORTSLITER—Steber Div Pyle-National Co
SPORTSMAN—Ray-O-Vac Co
SPOTTY—Curtis Lighting Div Curtis-All Brite Lighting
SPRA-MASK—Mystik Adhesive Products Inc
Sprague Electric Co North Adams Mass
Sprague Specialties Co—see Sprague Electric Co
SPRAYLITE—Silvray Lighting Inc
SPREADLITER—Steber Div Pyle-National Co
SPRING-A-LITE—Joy Mfg Co
Spring City Electrical Mfg Co Spring City 85 Pa
Spring City Foundry Co—see Spring City Electrical Mfg Co
SPRING-IN—Kirel Inc
Spring Load Mfg Corp 6332 Maynard Ave Seattle Wash
SPRING-O-MATIC—Industrial Electrical Works
SPRING WING—Paine Co
SPRING WINGS—Rawlplug Co Inc
SPRINGIN—Star Expansion
Square D Co Executive Plaza Park Ridge Ill
Square D Co Electric Controller & Mfg Div 4493 Lee Rd Cleveland 28 Ohio
SQUARE DUCT—Square D Co
SQUEEZON—Kearney (James R) Corp
STA-KON—Thomas & Betts Co
STA-OPEN—Ronal Electric Corp
Sta-Tite Mfg Co 2000 Wyandotte Kansas City 8 Mo
STA-VO-TROL—General Electric Co Apparatus Sales
Sta-Warm Electric Co 53 N Chestnut St Ravenna Ohio
Stab-Rite Electric Products Co—see Stabrite Fluorescent Mfg Co
STAB-LOK—Federal Pacific Electric Co
STABIL-GLOW—Blue M Electric Co
STABIL-THERM—Blue M Electric Co
STABILINE—Superior Electric Co
STABREAKER—Federal Pacific Electric Co
Stabrite Fluorescent Mfg Co 3550 Northwest 49 St Miami Fla
Stackpole Carbon Co Stackpole St St Marys Pa
Stahl Metals Products Inc 4750 W 160 St Cleveland 35 Ohio
Stahlin Bros Inc Belding Mich
STAIRCART—Di-Acro Corp
STAIRMASTER—Fairbanks Co
STALEY—Electric Switch Corp
STALOC—Mallory (P R) & Co Inc
Stamford Lighting—see Stamford Metal Specialty Co
Stamford Metal Specialty Co Inc 429 W Broadway New York 12 NY
Stampings Inc Suite 314 321 24th St Rock Island Ill
Stanat Mfg Co Inc 524 Shames Dr Westbury NY
Stanat Tool Machine Co—see Stanat Mfg Co Inc
STANDARD—Circle F Mfg Co
Standard Asbestos Mfg Co 860 Evergreen Ave Chicago 22 Ill
Standard Electric Div Standard Dayton Corp P O Box 1001 Dayton 1 Ohio
Standard Electric Mfg Co Inc Haddon Ave West Berlin NJ
Standard Electric Co Inc P O Box 6356 San Antonio 9 Tex
Standard Electric Time Co 89 Logan St Springfield 2 Mass
Standard Electrical Products Co 2240 E Third St Dayton 3 Ohio
Standard Portable Cord Co Inc Mayville NY
Standard Transformer Co 140 Dana St N E Warren Ohio
STANDCO—Sticht (Herman H) Co Inc
STANEON—General Cable Corp
Stanley Electric Tools—see Stanley Power Tools Div
Stanley Power Tools Div Stanley Works New Britain Conn
STAPUT FAIRLEADER—Barry (Williams B) Co
STAR—Standard Electric Co Inc
Star-A Electric Mfg Co Inc 269 Meserole St Brooklyn 6 NY
Star Expansion Mountainville NY
Star Expansion Bolt Co—see Star Expansion
STAR-GLO—Electro Lighting Corp
Star Kimble Motor Div—see Safety Electrical Equipment Corp
STAR-LUX—Curtis Lighting Div
STAR-LUX—Revere Electric Mfg Co
STAR PIN—Star Expansion
Star Porcelain Co Muirhead Ave Trenton 9 NJ
STAR STRIKE—Star Expansion
STAR STUD—Star Expansion
STARBRITE—Comet Lamp Co
STARLINE—Electro-Mechanical Instrument Co
Starrett (LS) Co Athol Mass
STARSTUD—Star Expansion
START-O-METIC—Airserco Mfg Co Inc
STARTZIT—Aircraft Specialties Inc
STAT-PACK—Magnetic Amplifiers Div
STATA—Square D Co Electric Controller & Mfg Div
STATELINE—Howard Industries Inc
States Co 19 New Park Ave Hartford 6 Conn
STATICATOR—Hewson Co Inc
STATICK—Hirschman-Pohle Co Inc
STATIKIL—Doyle (JE) Co
STATISCOPES—Minerallac Electric Co
STATOTROL—General Electric Co Apparatus Sales
STAVOLT—Christie Electric Corp
STAXAUSTER—Allen Cooler & Ventilator Inc
STAXRITE—Cutler-Hammer Inc
STAZIN—Star Expansion
Stearns Electric Corp 120 N Broadway Milwaukee 2 Wis
Stearns Magnetic Inc—Stearns Electric Corp
Steber Div Pyle-National Co 2700 Roosevelt Rd Broadview Ill
Steber Mfg Co—see Steber Div Pyle-National Co
STEBERLITE—Steber Div Pyle-National Co
Steel City Electric Co 1207 Columbus Ave Pittsburgh 33 Pa
Steel Electric Products Co Inc 5602 18th Ave Brooklyn 4 NY
Steel & Tubes Inc—see Republic Steel Corp
STEELARC—All-State Welding Alloys Co Inc
Steelduct Co Republic Steel Bldg Youngstown Ohio
STEELFLEX—Universal Metal Hose Co
STEELGRIP—Armstrong-Bray & Co
STEELTITE—Eliza Metal Products Co
STEELWING—Hubbard & Co
Steiner-Ives Co Springfield Rd Union NJ
Stemco Mfg Co Box 9024 Stockyards Sta Denver 16 Colo
STEMMAN—Ringsdorff Carbon Corp
STERILAMP—Westinghouse Electric Corp Lamp Div
Sterling Blower Co 791 Windsor St Hartford Conn
Sterling Electric Motor Inc 5401 Telegraph Rd Los Angeles 22 Calif
Sterling Siren Fire Alarm Co Inc 12 Bartlett St Rochester 8 NY
Sternberg Mfg Co 4510 Addison St Chicago 41 Ill
Sterner Industries Winsted 1 Minn
Stevens Appliance Truck Co Norton Rd (P O Box 897) Augusta Ga
STEWART-AIRE—Stewart Industries Inc
Stewart Bros Div Instrument Laboratories 315 W Walton Pl Chicago 10 Ill
Stewart Industries Inc 320 E St Joseph St Indianapolis 2 Ind

Stewart Mfg Co Inc—see Stewart Industries Inc
Sticht (Herman H) Inc 27 Park Place New York 7 NY
STICK-VAR—Electro-Technical Products Div
STICKLEBACK—Tec Imports
Stimple & Ward Co P O Box 1102 Pittsburgh 37 Pa
STIRRUP—Burndy Corp
STIXWEL—Clifton Mfg Co Inc
STOCK PICKER—Rol-Away Truck Mfg Co Inc
Stocker & Yale Inc Green St Marblehead Mass
STOCKLITE—Appleton Electric Co
STOK-FOUNT—International Electric Fence Co Inc
Stokes (F J) Corp 5500 Tabor Rd Philadelphia 20 Pa
Stokes (F J) Machine Co—see Stokes (F J) Corp
Stonco Electric Products Co 333 Monroe Ave Kenilworth NJ
Stone Mfg Co—see Stonco Electric Products Co
Stone Paper Tube Co 900 Franklin St N E Washington 17 DC
Stonite Coil Corp US Highway 130 Yardville NJ
STORACK—American Steel & Iron Works
STORAGE MASTER—Haertel (Walter) Co
Stow Mfg Co 162 Shear St Binghamton NY
Stradley Engineering Co P O Box 6006 Pittsburgh 11 Pa
STRAIGHT-LINE—Leviton Mfg Co Inc
STRAIGHT-LINE—Lyon Rural Electric Co
STRAIT-LINE—Irwin Auger Bit Co
STRATE-LINE—Pyle-National Co
Stratfield Co 434 Grand St Bridgeport 4 Conn
STRATO-LUX—Curtis Lighting Div
STRATO-RAY—Emerson-Pryne Co
STREAM COOLED—Baldor Electric Co
STRIALUX—Lightolier Inc
STRIKER—Star Expansion
STRING-A-LITE—Joy Mfg Co
STRINGER—Utilities Safety Supply Co Inc
STRIP EASE—Radix Wire Corp
STRIPMASTER—Ideal Industries Inc
STRIPSEAL—Burndy Corp
STROBOLUME—General Radio Co
STROBOTAC—General Radio Co
Stromberg Div General Time Corp 135 S Main St Thomaston Conn
Stromberg Electric Co—see Stromberg Div General Time Corp
Stromberg Time Corp—see Stromberg Div General Time Corp
STRUCTOR—Steel City Electric Co
Struthers-Dunn Inc Pitman NJ
STUD DRIVER—Remington Arms Co Inc
STUD-PINS—Fastway Fasteners Inc
STYLIST—Electro Lighting Corp
STYROFLEX—Natvar Corp
SUBALOX—Subox Inc
SUBMATIC—Franklin Electric Co Inc
SUBMERSIPOOL—Franklin Electric Co Inc
Subox Inc Fairmount Plant Hackensack NJ
SUBURBAN—Reed Unit-Fans Inc
SUBURBANITE—Miller Co Illuminating Div
Suclar Laboratories Inc 1197 McCarter Highway Newark NJ
SUDDEN DEPTH—Paine Co
Suflex Corp 33-40 57th St Woodside 77 NY
Sulflo Inc 1143 E Jersey St Elizabeth 4 NJ
Sultan Electric Co—see Acme Lighting & Mfg Co
Sultan Lighting Co—see Acme Lighting & Mfg Co
Summit Instrument Co—see Seely Instrument Co Inc
SUMPTROL—Square D Co
Sun Electric Products Inc 28 S Day St Orange NJ
Sun-Heat Inc 998 E Woodbridge Detroit 7 Mich
Sun-Lite Mfg Co 2555 Bellevue Ave Detroit 7 Mich
Sun-Tron Corp 7435 W Wilson Ave Chicago 31 Ill
Sunbeam Lighting Co 777 E 14th Pl Los Angeles 21 Calif
Sunbeam Visionaire Lighting Co—see Sunbeam Lighting Co
Sundh Electric Co—see Clark Controller Co
Sunrise Products Co—see Vemaline Products Co
SUNSWITCH—Ripley Co Inc
Sunwarm Inc 1601 Jared Dr (P O Box 266) Kingsport Tenn
SUPAIRTHERMAL—Nordberg Mfg Co
SUPER—Surelite Products Co
SUPER CORONOL—General Electric Co Wire & Cable Dept
SUPER DREADNAUGHT—Gould-National Batteries Inc
SUPER-EONITE—Kaiser Aluminum & Chemical Sales Inc
SUPER-GRIP—Diamond Expansion Bolt Co Inc
SUPER HI—Westinghouse Electric Corp Lamp Div
SUPER INDUSTRIAL—National Specialties Co Inc
SUPER-LAG—Bussmann Mfg Div
SUPER-LOK—Steber Div Pyle-National Co
SUPER MAGNET—Cutler-Hammer Inc
SUPER POWER—Coffing Hoist Div
SUPER-POWER—Ramset Fastening System
SUPER SERVICE—Accurate Mfg Co
SUPER SERVICE—General Cable Corp
SUPER SERVICE—National Super Service Co
SUPER 66—Eagle-Picher Co
SUPER SPEED-LINE—Garcy Lighting Div Garden City Plating & Mfg Co
SUPER-STIK—Superior Insulating Tape Co
SUPER SUCTION—National Super Service Co
Super Tool Co 21650 Hoover Rd Detroit 13 Mich
SUPER-V-BEAM—Duro-Test Corp
SUPER-WHITE—Duro-Test Corp
SUPERBUILT—Electrical Mfg Co
SUPERCON—Superior Electric Co
SUPERCYCLE—Chicago Pneumatic Tool Co
SUPERFORMED—Fanner Mfg Co Electrical Products Div
SUPERIOR—Champion DeArment Tool Co
SUPERIOR—Erie Tool Works
SUPERIOR—Round (David) & Son Inc
SUPERIOR—Wall (P) Mfg Co
Superior American Fire Alarm Div—see Fyr-Fyter Co Engineered Systems Div
Superior Appliance Co—see Superior Interlock Corp
Superior Carbon Products Co 9115 George Ave Cleveland 5 Ohio
Superior Electric Co 83 Laurel St Bristol Conn
Superior Electric Mfg Co Inc—see Eagle Electric Mfg Co Inc
Superior Insulating Tape Co 3100 Lambdin Ave St Louis 15 Mo
Superior Interlock Corp 73-39 Central Ave Glendale 27 NY
Superior Mfg Co—see Superior Staple Mfg Co
Superior Porcelain Co 931½ Market St Parkersburg W Va
Superior Staple Mfg Co 40 Commercial St Fitchburg Mass
SUPERJUSTABLE—Williams (J H) & Co
SUPERMARKETER—Miller Co
SUPERMATER—Willard Storage Battery Div
SUPERRENCH—Williams (J H) & Co
SUPERSEAL—Anaconda Wire & Cable Co
SUPERSHEATH—General Cable Corp
SUPERSOCKET—Williams (J H) & Co
SUPERTEL—General Cable Corp
SUPERTITE—Engelhard Industries Inc
SUPRAMICA—Mycalex Corp of America
SUPREME—Kaiser Aluminum & Chemical Sales Inc
SUPREME—New England Carbide Tool Co Inc
SUPREME—Scranton Storage Battery Corp
Supreme Electric Products Co 194 Vassar St Rochester 7 NY
Supreme Lighting Co 600 E Turner St Los Angeles Calif
SUPRENE—Collyer Insulated Wire Co
Supro Lux Mfg Co Inc 406-416 E 161 St New York 51 NY
SUR-GROUND—So-Cal Electro Products Inc
SURCO—Surprenant Mfg Co
SURE-BUILT—Shure Mfg Corp
SURE-LITE—House-O-Lite Corp
SURELITE—Clean Sweep Co
Surelite Products Co 368 E 148 St New York 55 NY
Surety Rubber Co North High St Carrollton Ohio
SURF-A-LITE—Electro Lighting Corp
SURFA-ETCH—Rust-Oleum Corp
SURFA-SELE—Rust-Oleum Corp
SURFACEDUCT—National Electric Div
SURFACELINE—Miller Co Illuminating Div
SURFEX—Pass & Seymour Inc
SURFLENE—Surprenant Mfg Co
SURFLEX—Surprenant Mfg Co
SURFLOW—Surprenant Mfg Co
Surprenant Mfg Co 199 Washington St Boston 8 Mass
Surrette Storage Battery Co Inc Jefferson Ave Salem Mass
SURVO—Surprenant Mfg Co
Suttle Equipment Co 135 LaSalle St Chicago 3 Ill
Swan Mfg Co 1801 W 26 St Vancouver Wash
SWAN-STATS—Swan Mfg Co
SWEATRITE—Dunton (MW) Co
SWEDG-ON—Lenco Inc
Swedish Iron & Steel Corp 910 Westfield Ave Elizabeth NJ
Swett (A L) Iron Works 166 Glenwood Ave Medina NY
SWING-AWAY—Electrical Mfg Co
SWING-EASY—Anderson (Albert & JM) Mfg Co
SWING TOP—Electrical Fittings Corp
SWING-WA—General Electric Co Apparatus Sales
Swiss Jewel Co 225 Lafayette Bldg Phila 6 Pa
SWITCH-KING—Cable Electric Products Inc
SWITCH MAT—Recora Co Inc
SWITCH-O-LITE—Hoffman Engineering Corp
SWITCHETTE—General Electric Co
SWITCHMATIC—Eagle Electric Mfg Co Inc
SWITCHSTAT—Penn Controls Inc
Swivelier Co Inc Nanuet NY
SWIVELITE—Amplex Corp
SYLKYD—Dow Corning Corp
SYLVALOY—Driver (Wilbur B) Co
Sylvania Electric Products Inc 730 Third Ave New York 19 NY
SYNALITE—Mitchell Lighting Div
SYNCHRON—Hansen Mfg Co Inc
SYNCHROSTAT—Electric Machinery Mfg Co
SYNCRAMENTAL—Ledex Inc
SYNCRO-BREAK—Square D Co
SYNCRO-SPEDE—Allis (Louis) Co
SYNCROGEAR—U S Electrical Motors Inc
SYNCROGRAPH—Allen Electric and Equipment Co
SYNDUCTION—Allis-Chalmers Mfg Co
SYNKOTE—Plastoid Corp
SYNROFLASHING—Blackhawk Industries
SYNRUB—Kaiser Aluminum & Chemical Sales Inc
SYNTHAMICA—Mycalex Corp of America
SYNTHINOL—Rome Cable Div of Alcoa
SYNTHITE—Dolph (John C) Co
SYNTHOL—Crescent Insulated Wire & Cable Co
SYNTHOLVAR—Varflex Corp
Syntron Co 690 Lexington Ave Homer City Pa
System Analyzer Corp 700 W State St Nokomis Ill

T

TA Mfg Corp 4607 Alger St Los Angeles 39 Calif
T & B—Thomas & Betts Co
T-D—Chase-Shawmut Co
TEC—Circle F Mfg Co
TK—Tuttle & Kift Inc
T-POWER—Motorola Communications & Electronics Inc
T V Wire Products—see Tevco Insulated Wire
T-W—Taylor-Winfield Corp
TA POT—Howell Instruments Inc
TAB-WELD—Square D Co Electric Controller & Mfg Div
Taco West Corp—see West Instrument Corp
Taitco Div Tait Mfg Co 500 Webster St Dayton 1 Ohio
TAKK—Hewson Co Inc
TAL-BENDER—Hein-Werner Corp
Talk-A-Phone Co 5013 N Kedzie Ave Chicago 25 Ill
TALKMASTER—Dalmotron Co
TALL REACH—Kett Tool Co
TALLESCOPE—Up-Right Inc
TAMPIN—Star Expansion
TAN-O-MITE—Ohmite Mfg Co
TAND-O-LITE—House-O-Lite Corp
TANKTROL—Automatic Control Co
TANSOL—Mallory (P R) & Co Inc
TANTALYTIC—General Electric Co
TAN-A-RAY—Penetray Corp
TAP-EEZ—Bryant Electric Co
TAP-IT—U S Expansion Bolt Co
TAP LITE—Minneapolis-Honeywell Regulator Co
TAP-ON—Tomic Sales & Engineering Co
TAPE CHASER—Chase & Sons Inc
TAPE-MATE—Holub Industries Inc
TAPERDRUM—Art Metal Lighting Div
TAPIT—Burndy Corp
TARGET—Anchor Packing Co
TATTELITE—Sittler Corp
TATTELITE-TESTER—Rodale Mfg Co Inc
TAURIL—Anchor Packing Co
Taylor (R W) Electric Co—see Taylor Electric Inc
Taylor Electric Inc 15400 Dale Detroit 23 Mich
Taylor Fibre Co Norristown Pa
Taylor-Winfield Corp 1052 Mahoning Ave NW Warren Ohio
TAYLORITE—Taylor Fibre Co
TAYLORON—Taylor Fibre Co
Tec Imports 15001-03 Califa St Van Nuys Calif
Technical Development Corp—see Haydon (A W) Co
Technical Electronics Co—see Haydon (A W) Co
Technical Electronics Corp—see Haydon (A W) Co
TECHNITE—Capewell Mfg Co
Technology Instrument Corp 531 Main St Acton Mass
Tedcar Products Co Box 1209 Union NJ
TEEL—Dayton Electric Mfg Co
TEELON—Benjamin Electric Mfg Co
Tektronix Inc P O Box 500 Beaverton Ore
TEL-A-PIPE—Westline Products Div
TEL-ALARM—Industrial Automation Corp
TEL-ALARM—Tigerman Engineering Co
TEL-O-SET—Minneapolis-Honeywell Regulator Co
TELAPPROACH—American District Telegraph Co
Telcon Inc P O Box 216 Pacific Palisades Calif
Tele-Jac Co 2200 Tyler Ave El Monte Calif
TELEC-CON—Southwestern Plastic Pipe Co
TELECABLE—Whitney Blake Co
TELECATOR—Automatic Control Co
TELECOM—Webster Electric Co
TELECORD—Whitney Blake Co
TELECORDER—Automatic Control Co
TELEDUCT—Whitney Blake Co
TELEFRAME—Whitney Blake Co
TELEGROUND—Whitney Blake Co
TELEMAND—I-T-E Circuit Breaker Co
TELEPRENE—Whitney Blake Co
TELESCAN—Automatic Control Co
TELESCOPER—Economy Engineering Co
TELESCOPIC—Kulka Electric Corp
TELESEAL—Whitney Blake Co
TELESTER—Automatic Control Co
TELETALK—Webster Electric Co
TELETHERM—American District Telegraph Co
TELETROF—Howard Electric Co
TELETROL—Automatic Control Co
TELEVOLT—Sola Electric Div
Telsta Corp 2900 Spring St Redwood City Calif
TEMCO—Electrical Mfg Co
TEMCO—Thermolyne Corp
TEMCOMETER—Thermolyne Corp
TEMFLEX—Minnesota Mining & Mfg Co Irvington Div
TEMP-O-LARM—Kidde Ultrasonic & Detection Alarms Div
TEMP-R-TAPE—Connecticut Hard Rubber Co
TEMP-TERMS—ETC Inc
TEMPA-TUBE—Acra Electric Corp
TEMPALL—Tobe Deutschmann Corp
TEMPBRAID—Hitemp Wires Co
TEMPCLAD—Hitemp Wires Co
Templeton Kenly & Co Gardner Rd Broadview Ill
TEMPOTHERM—General Controls Co
TEMPRENE—Hitemp Wires Co
TEMPREX—Hitemp Wires Co
TEMPRITE—Hitemp Wires Co
TEMPTUBE—Hitemp Wires Co
TENAX—Diamond Expansion Bolt Co Inc
TENER—Mole-Richardson Co
TENNA-ROTOR—Alliance Mfg Co Inc
TENNA-SHINGLE—Javex Electronics
TENNA-TUBE—Javex Electronics
Tennessee Plastics Inc Box 3117 Carroll Reece Branch Johnson City Tenn
TENS-A-MATIC—Murray Equipment Co Inc
TENSILOK—General Cable Co
TENSITE—Driver (Wilbur B) Co
TENSOLEX—Tensolite Insulated Wire Co Inc
Tensolite Insulated Wire Co Inc West Main St Tarrytown NY
TENSOLON—Tensolite Insulated Wire Co Inc
TENX—General Electric Co Wire & Cable Co Inc
Terado Co 1068 Raymond Ave St Paul 14 Minn
TERAGLAS—Natvar Corp
TERMINAL BLOCKS—Wama Co

TERMITE—Relton Corp
Termite Drills Inc—see Relton Corp
TERRA-TRAN—R T & E Corp
TESCO—Eastern Specialty Co
TEST-MASTER—Amprobe Instrument Corp
TESTO LITES—Brach Mfg Co
TESTONIC—Blue M Electric Co
TETCO—Electric Tachometer Corp
Tevco Insulated Wire 108 E Prospect Ave Burbank Calif
Texas Creosoting Co P O Box 131 Orange Tex
TEXSLIDE—Allis-Chalmers Mfg Co
TEXSUN—Gar Wood Industries Inc
Tey Mfg Co—see United States Air Conditioning Corp
Theiler (H J) Corp Ashmont Ave Whitinsville Mass
Thepitt Mfg Co Gregg & Hammond Sts Carnegie Pa
Ther Electric & Machine Works 17 S Jefferson St Chicago 6 Ill
THER-MONIC—Induction Heating Corp
THERM-O-METER—Simpson Electric Co
THERM-O-TRON—Trindl Products Ltd
THERMA-MARK—North Shore Nameplate Div
Thermador Electrical Mfg Co 5119 District Blvd Los Angeles 22 Calif
THERMAL-AIRE—Garden City Fan & Blower Co
Thermal-Aire Inc—see Thermal-Aire of America Inc
Thermal-Aire of America Inc 10 State Street (Room 905) Boston Mass
Thermal American Fused Quartz Co 18 Salem St Dover NJ
Thermal Syndicate Ltd—see Thermal American Fused Quartz Co
THERMALEZE—Phelps Dodge Copper Products Corp
THERMALINE—Line Electric Co
THERMALL—LaRose (WT) & Associates Inc
THERMALOAD—Monitor Controller Div Atlee Corp
THERMALON—Hitemp Wires Co
THERMASTER—Willard Storage Battery Div
THERMATROL—Hatfield Wire & Cable Div
THERMISTEMP—Yellow Springs Instrument Co Inc
Thermo Electric Mfg Co—see Thermolyne Corp
THERMO-GRIP—Ideal Industries Inc
THERMO-TECTOR—General Electric Co Apparatus Sales
THERMO-TIP—Ideal Industries Inc
THERMO-TRIEX—Triangle Conduit & Cable Co Inc
THERMOLAIN—Star Porcelain Co
Thermolyne Corp 513 Huff St Dubuque Iowa
Thermon Mfg Co 1017 Rosine St Houston Tex
THERMOPILOT—General Control Co
THERMOPLAX—Cutler-Hammer Inc
THERMOPRENE—Whitney Blake Co
THERMOSTATIC—Wall (P) Mfg Co
THERMOSWITCH—Fenwal Inc
THERMOWELD—Burndy Corp
THETA—Trombetta Solenoid Corp
Thiel Tool & Engineering Co 1417 N Market St St Louis 6 Mo
THIMBLEYE—Chance (A B) Co
THIN LINE—Sun-Lite Mfg Co
THINLINE—General Electric Co Major Appliance Div Room Air Conditioner Dept
THINPLATE—Park Nameplate Co Inc
THIRTY—Gould-National Batteries Inc
Thomas Associates—see TA Mfg Corp
Thomas & Betts Co 36 Butler St Elizabeth 1 NJ
Thomas Instrument Co Box 41 Liverpool Rd Phoenix NY
Thomas (R) & Sons Co—see Delta-Star Electric Div HK Porter Co Inc
Thompson Electric Co P O Box 873 Cleveland 22 Ohio
Thompson (Henry G) & Son Co 277 Chapel St New Haven 5 Conn
Thompson Mfg Co 611 Stevens St Geneva Ill
Thor Power Tool Co 175 N State St Aurora Ill
THOREX—Ohio Brass Co
THORO-FLARE—Emarco Corp
THRED-O-MATIC—Collins Machinery Corp
THREE "E"—Electrical Engineers Equipment Co
THREE "G"—Gruber Bros Inc
THREE-U-LITE—Northern Incandescent Lamp Co
THRIFTY—Marathon Battery Co
THRIFTY-CALL—Simpson (Mark) Mfg Co Inc
THUNDER-TWIST—New England Carbide Tool Co Inc
THUNDERBOLT—Vulcan Electric Co
THYMOTROL—General Electric Co
TI-CO—Thomas Instrument Co
TI-MITE—Paragon Electric Co
TIFFIN—Quincy Mfg Co
TIGER BRAND—American Steel & Wire Div United States Steel Corp
Tigerman Engineering Co 4332 N Western Ave Chicago 18 Ill
Tilden Tool Mfg Co Inc 209 Los Molinos San Clemente Calif
TILECOTE—Wilbur & Williams Co Inc
TIMBERLINE—Dixie Controller Inc
TIME-A-TROL—Acro Switch Div
TIME-ALL—International Register Co
TIME-MINDER—International Register Co
TIMEMASTER—Willard Storage Battery Div
Times Appliance Co Wire & Cable Div—see Times Wire & Cable Div
Times Wire & Cable Div International Silver Co Wallingford Conn
TIN-EZY—Johnson Mfg Co Inc
TINOL—American Solder & Flux Co
TINY-GLOW—Industrial Devices Inc
TINYLITES—Drake Mfg Co
TIP-TOP—General Cable Co
TIP TOP—Relton Corp
TIPIT—Shaw-Box Crane & Hoist Div Manning Maxwell & Moore Inc
TIPLETS—Ungar Electric Tools Div of Eldon Industries Inc
TIREX—Simplex Wire & Cable Co
TITAN—Detroit Hoist & Machine Co
Titchener (E H) & Co 67 Clinton St Binghamton NY
TITE-BEND—Thomas & Betts Co
TITE-BITE—Thomas & Betts Co
TITEBILT—Phelps Dodge Copper Products Corp
Tobe Deutschmann Corp Providence Highway Norwood Mass
Tocco Div Ohio Crankshaft Co 3800 Harvard Ave Cleveland 5 Ohio
Tod-Lite Inc 3401 N W 10 St Oklahoma City Okla
TOG-L-SNAP—I-T-E Circuit Breaker Co
Toledo Commutator Co 1101 S Chestnut St Owosso Mich
Toledo Pipe Threading Machine Co P O Box 1678 Toledo 3 Ohio
Toledo Standard Commutator Co—see Toledo Commutator Co
Tolen (William) & Son Inc 4041 Ridge Ave Philadelphia Pa
Tomic Sales & Engineering Co 20000 Sherwood Ave Detroit 34 Mich
TONEPAK—Lee Electric Inc
TONG-TEST—Columbia Electric Mfg Co
TONOTRON—Hughes Aircraft Co
TONRAC—American-Standard
TOOTS-E—Lovsted (C M) & Co Inc
Topflight Corp 160 E 9th Ave York Pa
Topflight Tape Co—see Topflight Corp
Topflight Tool Co—see Topflight Corp
TOPHBESTOS—Driver (Wilbur B) Co
TOPHET—Driver (Wilbur B) Co
TOPLITE—Swivelier Co Inc
TOPNOTCH—Day-Brite Lighting Inc
TOPPER—Hubbell (Harvey) Inc
TORCH-O-MATIC—Mine Safety Appliances Co
Tork Clock Co—see Tork Time Controls Inc
TORK-MASTER—General Control Corp
Tork Time Controls Inc 1000 Grove St Mt Vernon NY
TORKMASTER—Tork Time Controls Inc
TORKOL—Line Material Industries
TORNADO—Breuer Electric Mfg Co
TORPEDO—Swivelier Co Inc
TORQUE LIFT—Atlas Overhead Door Co
TORQUETROL—Electronic Control Corp
Torrington Co 59 Field St Torrington Conn
TORRIVENT—Trane Co
TOTALUME—Wilbur & Williams Co
TOTRUST—Wilbur & Williams Co
TOUCH-A-MATIC—Eagle Electric Mfg Co Inc
Touch-Plate Mfg Corp Box 1970 Long Beach Calif
TOUCHETTE—Rodale Mfg Co Inc
Tower Craftsmen Inc 105 Chestnut St Red Bank NJ
TOWN & HIGHWAY—Westinghouse Electric Corp
TOYLIGHT—Aerolux Lights Corp
TRA-BAK—Great Northern Mfg Corp
TRAC-O-LITE—Comet Lamp Co
Trade Service Publications Inc 341 E Ohio St Chicago 11 Ill
Trade-Wind Div Robbins & Myers Inc 7755 Paramount Pl Pico Rivera Calif
Trade-Wind Motorfans Inc—see Trade-Wind Division Robbins & Myers Inc
TRADELITER—Duro-Test Corp
TRAFFLEX—Crouse-Hinds Co
Trane Co 2nd & Cameron Ave La Crosse Wis
TRANFO-UNIT—I-T-E Circuit Breaker Co
TRANOLSEAL—Johns-Manville
TRANQUILITE—Day-Brite Lighting Inc
TRANS-ALARM—Tigerman Engineering Co
TRANS-O-MATIC—Lake Shore Electric Corp
TRANSACTER—Stromberg Div General Time Corp
TRANSCO—Coil Co of America Inc
TRANSFEX—Minnesota Mining & Mfg Co Irvington Div
TRANSI-MAG—Magnetic Amplifiers Div
TRANSISTA FLASH—U-C Lite Mfg Co
TRANSITE—Johns-Manville
Transolite Corp 515 Madison Ave New York 36 NY
TRANSPORTER—Automatic Transportation Co
TRANSRACK—Sangamo Electric Co
TRANSRIDER—Automatic Transportation Co
TRANSTACKER—Automatic Transportation Co
TRANSTRACTOR—Automatic Transportation Co
TRANSVERTER—Hertner Electric Co
TRANSVEYOR—Automatic Transportation Co
TRAP-DRI—Controls Co of America
TRAPIT—Controls Co of America
TRAV-ELECTRIC—Terado Co
TRAVEL TOWER—Pitman Mfg Co
TREADLITE—Linemaster Switch Corp
TRENCHLAY—General Cable Corp
Trent (Harold E) Co—see Trent Inc
Trent Inc 201-299 Leverington Ave Phila 27 Pa
TRI-AMP—Radio Receptor Co Inc
TRI-CLAD—General Electric Co
TRI-FLUX—Redmond Co Inc
TRI-LITE—Artistic Lamp Mfg Co Inc
TRI-ONIC—Chase-Shawmut Co
TRI-PAK—Perfection Industries Div Hupp Corp
Tri-Part Mfg Co 359 S Jessie St (P O Box 178) Pontiac Mich
TRI-PHASE—Taylor-Winfield Corp
TRI-WAY—U S Expansion Bolt Co
TRIADRY—Triangle Conduit & Cable Co Inc
Triangle Conduit & Cable Co Inc Triangle & Jersey Aves New Brunswick NJ
Triangle Equipment Co Inc 45 River Rd Nutley 10 NJ
Triangle Instruments Co—see Epco Electronics Inc
Trico Fuse Mfg Co 2948 No 5th St Milwaukee 12 Wis
TRICO-MIST—Trico Fuse Mfg Co
TRICON—Triangle Conduit & Cable Co Inc
TRIEX—Triangle Conduit & Cable Co Inc
TRIFORMANCE—Triangle Conduit & Cable Co Inc
TRIG—Rustan Corp
TRIG-R-HEAT—Wall (P) Mfg Co
TRIG TOWERS—Rostan Corp
TRIMLINE—Rome Cable Div of Alcoa
Trimount Instrument Co—see Trimount Instrument Div General Controls Co
Trimount Instrument Div General Controls Co 8080 McCormick Blvd Skokie Ill
Trindl Products Ltd 1807-11 S Clark St Chicago 16 Ill
Trine Mfg Corp 1430 Ferris Place New York 61 NY
Trio Laboratories Inc Expressway Industrial Park Plainview NY
TRIOLENE—Triangle Conduit & Cable Co Inc
TRIOLINE—Triangle Conduit & Cable Co Inc
TRION—Chase-Shawmut Co
TRIONET—Chase-Shawmut Co
TRIONODE—Walkirt Co
TRIOPRENE—Triangle Conduit & Cable Co Inc
TRIOSEAL—Triangle Conduit & Cable Co Inc
TRIOZONE—Triangle Conduit & Cable Co Inc
TRIP-O-LINK—Kearney (James R) Corp
TRIP-OUT—Kearney (James R) Corp
TRIP-SAVER—Kearney (James R) Corp
TRIP-X-TAP—Dossert Mfg Corp
TRIPILITE—Marco Industries
TRIPLE-A—Quigley Co Inc
Triple-A Specialty Co 2835 N Western Ave Chicago 18 Ill
Triplett Electrical Instrument Co 286 Harmon Rd Bluffton Ohio
TRIPLEYE—Chance (A B) Co
TRIPLOC—Pyle-National Co
TRIPLOX—Nemco Electric Co
TRIPOLI—Swivelier Co Inc
TRIPOMATIC—Kearney (James R) Corp
Trippe Mfg Co 133 N Jefferson St Chicago 6 Ill
TRIPRUF—Triangle Conduit & Cable Co Inc
TRISTEEL—Triangle Conduit & Cable Co Inc
Triton Mfg Co Inc East Haddam Conn
TROJAN—Hexacon Electric Co
Trojan Lighting Co 663 State St San Diego Calif
TROL-E-DUCT—I-T-E Circuit Breaker Co BullDog Electric Products Div
Trombetta Solenoid Corp 329 N Milwaukee St Milwaukee 2 Wis
TROMBOLITE—Amplex Corp
TRON—Bussmann Mfg Div
TROPIC-GLO—Knapp-Monarch Co
TROPIC-AIRE—McGraw-Edison Co Albion Div
TROUBLE SAVER—Patent Scaffolding Co Inc
TRU-ROL—Rollway Bearing Co Inc
TRU-SET—Ramset Fastening System
TRU-START—Holub Industries Inc
TRU-TORK—Nankervis (Geo L) Co
TRU-WHITE—Duro-Test Corp
TRUC-POWER—Perkins Battery Co
Truco Masonry Drilling Div Wheel Trueing Tool Co 3200-3220 W Davison Ave Detroit 38 Mich
TRUCOLITE—Guth (Edwin F) Co
Trumbull Components Dept—see General Electric Co
Trumbull Electric Mfg Co—see General Electric Co
TUBELOX—Patent Scaffolding Co Inc
TUBENDERS—Henderson Electric Co
TUBETROF—P-W Industries Inc
TUCALL—Edwards Co Inc
TUCKAWAY—Perfection Industries Div
TUFFEX—Everwarm Inc
TUG—Mercury Mfg Co
TUGIT—Shaw-Box Crane & Hoist Div Manning Maxwell & Moore Inc
TULAMP—General Electric Co
TULITO—Meyer Machines Inc
Tulsa Winch Div—see Vickers Inc Tulsa Products Div
TUMB-L-TITE—U S Expansion Bolt Co
TUMBLIN—Star Expansion
TUMS—Hykon Mfg Co
TUNGAR—General Electric Co
TUR-O-STRIP—House-O-Lite Corp
TURBO-COMPRESSORS—Spencer Turbine Co
TURBO-JET—Allis-Chalmers Mfg Co
Turbo Machine Co Lansdale Pa
TURBO-RUPTOR—Allis-Chalmers Mfg Co
TURBO-VAC—Kent Co
TURBOVANE—Westinghouse Electric Corp
TURBOZIP—Illumitronic Engineering Corp
Turco Products Inc 24600 S Main St Wilmington Calif
TURCO-SOLV—Turco Products Inc
Turkey Creek Mfg Co—see Von Corp
TURN TYTE—Rodale Mfg Co Inc
TURNDICATOR—General Controls Co
Turner Brass Works 821 Park Ave Sycamore Ill
TURNEX—Woodhead (Daniel) Co
TURNLOK—Pass & Seymour Inc
TURQUOISE—Duro-Test Corp
TURRET—General Electric Co
Tuttle & Kift Inc 1823 N Monitor St Chicago 39 Ill
TWIN—General Electric Co Apparatus Sales
TWIN-LUG—Blackburn (Jasper) Corp
TWIN-SIX—Burgess Battery Co
TWINDUCT—National Electric Div H K Porter Co
TWINEYE—Chance (A B) Co
TWINLINE—York Div Borg-Warner Corp
TWIST-IN—Tomic Sales & Engineering Co
TWIST-LOC—Universal Metal Hose Co
TWIST-LOCK—Hubbell (Harvey) Inc
TWIST-MOUNT—Pyramid Electric Co
TWIST-RACK—P-W Industries Inc
TWIST-TITE—Hubbell (Harvey) Inc
TWO-SHOT—Kaiser Aluminum & Chemical Sales Inc
TY-RAP—Thomas & Betts Co
TYNEE-DRY—Pyramid Electric Co
TYNISWITCH—American-Standard Controls Div
TYPHOON—Typhoon Air Conditioning Div
Typhoon Air Conditioning Div Hupp Corp 505 Carroll St Brooklyn 15 NY

Typhoon Prop-R-Temp—see Typhoon Air Conditioning Div
TYPOTRON—Hughes Aircraft Co
TYSON—SKF Industries Inc
TYTEX—Exide Industrial Div
TYTON—U S Expansion Bolt Co

U

U-BLADE—Leviton Mfg Co Inc
U-C-Lite Mfg Co 1050 W Hubbard St Chicago 22 Ill
U-RAD—Wiegand (Edwin L) Co
U-RE-LITE—I-T-E Circuit Breaker Co
UPPCO Inc 900 S Desplaines St Chicago 7 Ill
U S E—U S Expansion Bolt Co
USG—United States Graphite Co
UTC—United Transformer Corp
UCILON—Metal & Thermit Corp
UFLEX—Hatfield Wire & Cable Div Continental Copper & Steel Industries Inc
Ulanet (George) Co 413-15 Market St Newark 5 NJ
ULTI-MOLD—Royal Electric Corp
ULTRA-FLEXARMS—White (O C) Co
ULTRA-LITE—Revere Electric Mfg Co
ULTRA-LUX—Garcy Lighting Div
ULTRA-TEMP—Blue M Electric Co
ULTRA-VAPOR—Viking Air Products Div
Ultra-Violet Products Inc 5114 Walnut Grove Ave San Gabriel Calif
ULTRAFLEX—Cutler-Hammer Inc
ULTRALUME—Westinghouse Electric Corp Lamp Div
ULTRATUBE—Plastoid Corp
ULTRAVALVE—General Control Co
ULTRAVERTER—Blonder-Tongue Laboratories Inc
Unadco Mfg Co—see United Mfg Div
UNDARK—United States Radium Corp
Ungar Electric Tools Div of Eldon Industries Inc 1475 E El Segundo Blvd Hawthorne Calif
UNI-BALLAST—Line Material Industries
UNI-BUS—Electric Distribution Products Inc
UNI-BUS—Electric Machinery Mfg Co
UNI-CAST—Redmond Co Inc
UNI-CLIP—Unistrut Products Co
UNI-CORE—Alpha Metals Inc
UNI-CRIMP—Sherman (H B) Mfg Co
UNI-FORM'D—Zinsco Electrical Products
UNI-FRAME—Day-Brite Lighting Inc
UNI-LARM—Russell & Stoll Co Inc
UNI-PACT—Faraday Inc
UNI-PAK—I-T-E Circuit Breaker Co Walker Div
UNI-POWER—I-T-E Circuit Breaker Co Walker Div
UNI-TOG—Kirkwood Commutator Corp
UNIBRAKES—Master Electric Div
UNICHROME—Metal & Thermit Corp
UNICLAD—G & W Electric Specialty Co
UNICLOSED—U S Electrical Motors Inc
UNIFIED—Lake Shore Electric Corp
UNIFLEX—Zinsco Electrical Products
UNILET—Appleton Electric Co
UNILING—Pass & Seymour Inc
UNILITE—Electro Lighting Corp
Unimatic Corp Sherwood Lane Caldwell NJ
Unimax Switch Div W L Maxson Corp Ives Rd Wallingford Conn
UNION—Multi Electric Mfg Inc
Union Carbide Corp Silicones Div 30 E 42 St New York 17 NY
Union Equipment Sales Corp 1539 Superior Ave Cleveland 14 Ohio
Union Insulating Co Inc Box 351 Parkersburg W Va
Union Metal Mfg Co 1432 Maple Ave NE Canton 5 Ohio
UNIPAK—Sprague Electric Co
UNISEAL—Franklin Electric Co Inc
UNISEAL—Johns-Manville
UNISHEAR—Stanley Power Tools Div
UNISPEED—Stromberg Div General Time Corp
UNISPLICE—Burndy Corp
Unistrut Products Co 933 Washington Blvd Chicago 7 Ill
UNIT BLO—United Blower Co Inc
UNIT-VERSAL—I-T-E Circuit Breaker Co BullDog Electric Products Div
UNITAP—Dossert Mfg Corp
United Blower Co Inc 193 Centre St NY 13 NY
United Chromium—see Metal & Thermit Corp
United Cinephone Corp—see Ripley Co Inc
United Electric Controls Co 85 School St Watertown 72 Mass
United Electric Machinery Co 8545 W 64 PJ Arvada Colo
United Electric Motor Co 178 Centre St NY 13 NY
United Enterprises 15735 S Paramount Blvd Paramount Calif
United Lighting & Ceiling Co 2828 Ford St Oakland 1 Calif
United Mfg Co—see United Mfg Div
United Mfg Div W L Maxson Corp 41 Haig St Hamden 14 Conn
United Pressed Products Co—see UPPCO Inc
United States Air Conditioning Corp P O Box 360 Delaware Ohio
United States Air Conditioning Corp Skyworker Div Delaware Ohio
U S Electric Motor Co Cadiz Ohio
U S Electrical Motors Inc 200 E Slauson Ave Los Angeles 54 Calif
United States Electrical Tool Co 3640 Llewellyn St Cincinnati Ohio
United States Electronics Corp 275 Warren St Lynd-hurst NJ
U S Expansion Bolt Co State St & PRR York Pa
U S Gauge Co—see U S Gauge Div
U S Gauge Div American Machine & Metals Inc Clymer Ave Sellersville Pa
United States Graphite Co 1621 Holland Ave Saginaw Mich
U S MOTORS—U S Electrical Motors Inc
United States Motors Corp 102 W Fifth Ave Oshkosh Wis
U S PEERLESS—United States Rubber Co
United States Petroleum Co 104 Lakeview Ave Clifton NJ
United States Radium Corp Hanover Ave Morristown NJ
U S REVERE—United States Rubber Co
U S ROYAL—United States Rubber Co
United States Rubber Co 1230 Avenue of the Americas New York 20 NY
United States Rubber Co Naugatuck Chemical Div 946K Elm St Naugatuck Conn
U S Rubber Co Wire & Cable Div—see Kaiser Aluminum
United Transformer Corp 150 Varick St New York 13 NY
United Wire & Supply Corp 1497 Elmwood Ave Providence 7 RI
UNITIZED—Magnatran Inc
UNITOP—Allis-Chalmers Mfg Co
UNITRAN—Moloney Electric Co
UNITRANE—Trane Co
UNITRIP—Stromberg Div General Time Corp
UNITROL—Cutler-Hammer Inc
UNITRON—I-T-E Circuit Breaker Co
UNITYPE—Superior Interlock Corp
UNIVERSAL—Chicago Pneumatic Tool Co
UNIVERSAL—Hossfeld Mfg Co
UNIVERSAL—Mueller Electric Co
UNIVERSAL—Pittsburgh Reflector Co
Universal Clay Products Co 1558 First St Sandusky Ohio
Universal Electric Co 300 E Main St Owosso Mich
Universal Electric Sales Corp 3537 Lee Rd Cleveland 20 Ohio
Universal Mfg Corp 29-51 E 6th St Paterson NJ
Universal Metal Hose Co 2133 S Kedzie Ave Chicago 23 Ill
Universal Motor Co 438 Universal Dr Oshkosh Wis
Universal Power Corp—see Universal Electric Sales
Universal Welder Corp—see Universal Electric Sales
Universal Winding—see Leesona Corp
Up-Right Inc Up-Right Scaffolds Div 1013 Pardee St Berkeley 10 Calif
UPLIFTER—Revolvator Co
Uptegraff Mfg Co R E P O Box 182 Scottdale Pa
URBAN LITE—Revere Electric Mfg Co
Urell Inc Bradford Pa
USAIRCO—United States Air Conditioning Corp
USCO Power Equipment Corp 829 N 36th Way Birmingham 4 Ala
Utica Drop Forge Tool Corp—see Utica Drop Forge & Tool Div
Utica Drop Forge & Tool Div Kelsey-Hayes Co Utica 4 NY
UTIL-A-TOOL—Templeton Kenly & Co
UTIL-A-VENT—General Blower Co
UTILICON—Diamond Power Specialty Corp
UTILISCOPE—Diamond Power Specialty Corp
UTILITE—Steber Div Pyle-National Co
Utilities Safety Supply Co Inc Jefferson St & Highway 50 Lee's Summit Mo
Utilities Service Co 1 Pine St Allentown Pa
UTILITY—Arex Co
Utility Body Co 1530 Wood St Oakland 7 Calif
Utility Service Co Inc 1620 13th St (P O Box 102) Racine Wis
Utility Transformer and Equipment Co 702 Lynn Ave Baraboo Wis
UVILUX—Burton Mfg Co

V

VCU—Guth (Edwin F) Co
VHS RELAY—Assembly Products Inc
V-S—Master Electric Div Reliance Electric & Engineering Co
V V Fitting Co P O Box 1253 Merchantville NJ
VAC-A-BULB—Rite-O-Lite Co
VAC-A-TUBE—Rite-O-Lite Co
VAC-IT—Doyle Vacuum Cleaner Co
VAC-KING—American Floor Machine Co
VAC-ON—Hypro Engineering Inc
VAC-U-SEL—General Electric Co
VACMOBILE—Pullman Vacuum Cleaner Corp
Vaco Products Co 317 E Ontario St Chicago 11 Ill
VACU-BREAK—I-T-E Circuit Breaker Co BullDog Electric Products Div
VACU-MASTER—Hayes (C I) Inc
Vacuum Tube Products Co—see Hughes Aircraft Co
VALIMITOR—Square D Co Electric Controller & Mfg Div
Valley Fan Mfg Co Box 206 Fort Valley Ga
VALUBUL—Wheelock Signals Inc
VALV-AMP—General Electric Co
Van Dyke Div—see AOW Corp
VANO—Coppus Engineering Corp
VAP-O-TITE—Ideal Industries Inc
VAPOR LUX—Luxor Lighting Products Inc
VAPOR-TEMP—Blue M Electric Co
VAPORMASTER—Crouse-Hinds Co
VAPROTEX—Woodhead (Daniel) Co
VARBAND—Varflex Corp
VAREPACK—Electric Products Co
VAREX—Ohio Brass Co
VARFIL—Varflex Corp
Varflex Corp 508 W Court St Rome NY
VARFLO—Varflex Corp
VARGLAS—Varflex Corp
VARI-AMP—Allis-Chalmers Mfg Co
VARI-ANGLE—Weksler Instruments Corp
VARI-FEED—Trico Fuse Mfg Co
VARI-SPEED—Reeves Pulley Div Reliance Electric & Engineering Co
VARI-SPOT—Curtis Lighting Div
VARIAC—General Radio Co
VARICELL—Superior Electric Co
VARIDOT—Simpson Electric Co
VARIDYNE—U S Electrical Motors Inc
VARIFORM—Lighting Products Inc
VARILUX—Major Equipment Co Inc
VARISTAT—Ward Leonard Electric Co
VARITAP—Burndy Corp
VARY-TALLY—Veeder-Root Inc
VASCO—Mitchell Industries Inc
VAULTMASTER—Haertel (Walter) Co
VECTO-RAY—Swan Mfg Co
Veeder-Root Inc 70 Sargeant St Hartford 2 Conn
VEEDRUM—Art Metal Lighting Div
VEGA—Metalcraft Products Co Inc
Velocity Power Tool Co 201 N Braddock Ave Pittsburgh 8 Pa
VELOMETER—Illinois Testing Laboratories Inc
Velotronic 1186 Broadway New York 1 NY
VELVALUME—Day-Brite Lighting Inc
VENTAIR—Coppus Engineering Corp
VENTILATOR—Active Specialty Corp
Ventrola Mfg Co 501 S Chestnut St Owosso Mich
VENTURA—American-Standard
VENTURAFIN—American-Standard
VENTURIFLO—General Control Co
Verd-A-Ray Corp—see Penetray Corp
VERIBEST—Snyder (M L) & Son Inc
VERITELL—West Instrument Corp
Vemaline Products Co 511 Commerce St Franklin Lake NJ
VERS-A-CRIMP—Anderson Electric Corp
VERSA—Versen (Kurt) Co
VERSA GROOVE—Anderson Electric Corp
VERSA-MAGNET—Standard Portable Cord Co Inc
VERSA TRAILER—United States Motors Corp
Versabar Corp 14 Whyte St Jersey City NJ
VERSAL—Versen (Kurt) Co
VERSALINE—Miller Co
VERSARE—American-Standard
VERSATOL GEOPRENE—General Electric Co Wire & Cable Dept
VERSATER—Versen (Kurt) Co
VERSATIL—Versen (Kurt) Co
VERSATOL—General Electric Co Wire & Cable Dept
VERSATROL—Assembly Products Inc
VERSATRY—Versen (Kurt) Co
Versen (Kurt) Co 4 Slocum Ave Englewood NJ
VERSIL—Versen (Kurt) Co
VERSILIER—Keystone Electric Mfg Co
VERSITAP—Burndy Corp
VERSTRUM—Versen (Kurt) Co
VERTICON—Art Metal Lighting Div
VERTIDRUM—Art Metal Co
VERTOLITE—Line Material Industries
VI-TITE—Penn-Union Electric Corp
VIBRAPACK—Mallory (P R) & Co Inc
Vibrascope Co P O Box 97 Glenford NY
VIBRATONE—Federal Sign & Signal Corp
VIBROGROUND—Associated Research Inc
VIBROTEST—Associated Research Inc
Vickers Inc Electric Products Div 1847 Locust St St Louis 3 Mo
Vickers Inc Tulsa Products Div 731 E First St Tulsa 20 Okla
VICON—Insul-8-Corp
VICORAY—Whitaker (Douglas C) Co Inc
VICTOR—Ludlow Mfg & Sales Co
Victor Electric Wire & Cable Corp 618 Main St West Warwick RI
Victor Instrument Mfg Co Inc 33 W 60 St New York 23 NY
Victor Insulators Inc—see I-T-E Circuit Breaker Co
VICTOR JR—Trine Mfg Corp
Victor Specialties Inc 775 Main St New Rochelle NY
VICTOR SR—Trine Mfg Corp
Victor Ventilator Co—see Victor Ventilator Div
Victor Ventilator Div Philip Carey Mfg Co Middletown Ohio
VIEW PAK—Tevco Insulated Wire
VIEWLITER—Duro-Test Corp
VIGILTROL—Automatic Control Co
VIKING—Forsberg Mfg Co
VIKING—Mid-States Welder Mfg Co
Viking Air Products Div Lau Blower Co 5601 Walworth Ave Cleveland 2 Ohio
Viking Instruments Inc East Haddam Conn
Vimco Mfg Co Inc Main St Holland NY
VIMCOLIGHT—Vimco Mfg Co Inc
VINSOL—Rusgreen Mfg Co
Virden (John C) Co 5009-6103 Longfellow Ave Cleveland 3 Ohio
VIS-A-RAY—Duro-Test Corp
VIS-O-GLOW—Brach Mfg Co
VIS-O-MATIC—Co-operative Utilities Co Inc
VISA-VOLT—Advance Transformer Co
VISAFLAME—Mercoid Corp
VISION-AID—Amplex Corp
VISIONAIRE—Silvray Lighting Inc
VISIONAIRE—Sunbeam Lighting Co
VISITRON—Curtis Lighting Div
VISORLITE—Jay Lighting Mfg Co Inc
VISTALITE—Steber Div Pyle-National Co
VISUALIER—Garcy Lighting Div

VISUALITE—Magni Flood Inc
VISULARM—Crouse-Hinds Co
VITAC—Glastic Corp
VITALITE—Adjustable Fixture Co
VITALOY—Billings & Spencer Co
VITREOSIL—Thermal American Fused Quartz Co
VITROHM—Ward Leonard Electric Co
VITROLAIN—Star Porcelain Co
VITRONAMEL—Anaconda Wire & Cable Co
VITROTEX—Anaconda Wire & Cable Co
VIZ-AID—Day-Brite Lighting Inc
VOGUE-LITE—Swivelier Co Inc
Voigt Co 1636 N Carlisle St Phila 21 Pa
VOKALCALL—Auth Electric Co Inc
VOLSEAL—Johns-Manville
Voltarc Tubes Inc 44 Cross St Norwalk Conn
VOLTBOX—Superior Electric Co
VOLTEST—Davenport Mfg Div Duncan Electric Co Inc
VOLTINE—Waveland Electric Co
VOLTMASTER—Pioneer Gen-E-Motor Co
VOLTROL—Acme Electric Corp
VON—Hewson Co Inc
Von Corp 1036-40 Lomb Ave SW (P O Box 3566) Birmingham Ala
VOYAGER—Swivelier Co Inc
VOYCALL—Lake Mfg Co
VU-ALL—Cable Electric Products Inc
VU-BREAK—General Electric Co Apparatus Sales
Vulcan Electric Co 88 Holten St Danvers Mass
Vulcan Radiator Co 775 Capitol Ave Hartford 6 Conn
VULCAN TRIMLINE—Vulcan Radiator Co
VULKENE—General Electric Co—Wire & Cable Dept
VYCOR—Corning Glass Works

W

W B—Ware Fuse Corp
WGR—Roller (Wm G) Inc
W & T—Wallace & Tiernan Inc
Waage Electric Inc 720 Colfax Ave Kenilworth NJ
Wac Engineering Co—see Wac Line Inc
Wac Line Inc 35 S St Clair St Dayton 2 Ohio
WAC-TAC—Wac Line Inc
Wachs (E H) Co 1525 N Dayton St Chicago 22 Ill
Waco Mfg Co 5250 W 130 St Cleveland 30 Ohio
Wadsworth Electric Mfg Co Inc 20-34 W 11th St (Box 272) Covington Ky
WAFER—Keystone Electric Mfg Co
WAGENSELLER—Acme Mfg & Gasket Co
Wagner Electric Corp 6400 Plymouth Ave St Louis 33 Mo
Wagner Malleable Products Co 222 W Adams St Chicago 6 Ill
Wagner Mfg Co Inc—see Lenco Inc
Wahlund (M Paul) Mechanical Laboratory P O Box 16 Grant Iowa
Wakefield Brass Co—see Wakefield Lighting Div
Wakefield Lighting Div Wakefield Corp 731 S Water St Vermilion Ohio
Walco Electric Co 131 Blackstone St Providence 1 RI
Waldman (John J) Co 477 Atlantic Ave Brooklyn 17 NY
Walker Brothers P O Box 33 Conshohocken Pa
Walker Div—see I-T-E Circuit Breaker Co Walker Div
Walker Electrical Co Inc—see I-T-E Circuit Breaker Co Walker Div
WALKERDUCT—Walker Brothers
WALKERFLEX—Walker Brothers
WALKERINE—Walker Brothers
WALKERPRENE—Walker Brothers
WALKERSYN—Walker Brothers
WALKERZONE—Walker Brothers
WALKIE-WORKLIFTER—Economy Engineering Co
Walkirt Co 141 W Hazel St Inglewood 3 Calif
Wall (P) Mfg Co P O Box 71 Grove City Pa
WALL FIN—Trane Co
WALL LINE—Trane Co
Wallace & Tiernan Inc 25 Main St Belleville NJ
WALLENS—Art Metal Co
WALLGRIP—Star Expansion
WALLOY—Wall (P) Mfg Co
WALLURNLITE—Gruber Bros Inc
WALLY—Holub Industries Inc
Walser Automatic Timer Corp 420 Lexington Ave New York 17 NY
Walton Laboratories Inc 1186 Grove St Irvington 11 NJ
Wama Co Industrial Bldg Baltimore 2 Md
WARCO—Federal Machine & Welder Co
Ward Leonard Electric Co 28 South St Mount Vernon NY
Ware Bros—see Ware Fuse Corp
Ware Fuse Corp 4400 W Lake St Chicago 24 Ill
WAREHOUSER—Yale & Towne Mfg Co
Warner Electric Brake & Clutch Co Beloit Wis
Warren Lamp Co—see Solar Electric Co
Warrick (Chas F) Co 1964 W Eleven Mile Rd Berkley Mich
WARWICK—Hayden Twist Drill Co
Washington Aluminum Co Inc Knecht Ave Pennsylvania RR Baltimore 29 Md
WASSCO GLO-MELT—American Electrical Heater Co
WATCH DOG—General Electric Co
WATCHMASTER—Carpenter Mfg Co
Waterman Products Co Inc 2445-63 Emerald St Phila 25 Pa
WATERSEAL—Thomas & Betts Co
WATERTITE—Okonite Co
WATERTITE—Woodhead (Daniel) Co
Watlow Electric Mfg Co 1376 Ferguson Ave St Louis 14 Mo
Watteredge Co 19629 West Lake Rd Rocky River 16 Ohio
Waukesha Motor Co Waukesha Wis
Waveland Electric Co 5542 N Ashland Ave Chicago 40 Ill
WEATHER-CHRON—Automatic Devices Div American Machine & Metals Inc
WEATHER DUTY—Westinghouse Electric Corp Lamp Div
WEATHER-FLO—Automatic Devices Div American Machine & Metals Inc
WEATHER-MAN—Automatic Devices Div American Machine & Metals Inc
WEATHERBEST—Union Insulating Co Inc
WEATHERLOC—Continental Electric Equipment Co
WEATHERMAKER—Carrier Corp
WEATHERMASTER—Carrier Corp
WEATHERMASTER—Steber Div Pyle-National Co
WEATHERTRON—General Electric Co Air Conditioning Dept Central Air Conditioner
Weaver (J A) Co 2110 Howard St St Louis 6 Mo
Webb Electric Mfg Co 1701 S W Jefferson St Portland 1 Ore
Webster Electric Co 1900 Clark St Racine Wis
WEBSTER SOUND—Webster Electric Co
WEDGE-GRIP—Sherman (H B) Mfg Co
WEDGE-ON—Thomas & Betts Co
WEDGE-TITE—Kearney (James R) Corp
WEDGELOCK—Adalet Mfg Co
WEDGIE—Insulation Mfrs Corp
WEDGTITE—Crouse-Hinds Co
WEED KUTTER—International Electric Fence Co Inc
Weiss & Bihelier Merchandise Corp 40 W 20th St New York 11 NY
WEJ-IT—Kirel Inc
Wej-Lock Mfg Co—see Grip-Tite Mfg Co
Weksler Instruments Corp 195 E Merrick Rd Freeport L I NY
Weksler Thermometer Corp—see Weksler Instruments Corp
Welbilt Corp 57-18 Flushing Ave Maspeth 78 LI NY
Welch Mfg Co—see Raydyne Corp
WELCOME-LIGHT—Calumet Plastics Inc
Welcraft Products Co Inc—see Easy Heat Inc
WELDANPOWER—Lincoln Electric Co
WELDFORGED—Kerrigan Iron Works Co
WELDMASTER—Lewis-Shepard Products Inc
WELDOX—Hardman (H V) Co Inc
WELDPOWER—Raytheon Mfg Co
Welduction Corp 19400 W Eight Mile Rd (P O Box 146) Southfield Mich
WELDUCTOR—Welduction Corp
Weller Electric Corp 601 Stone's Crossing Rd Easton Pa
Weller Mfg Co—see Weller Electric Corp
Wellington Machine Co 133 De Wolf St Wellington Ohio
Wellmade Metal Products Co 860 81st Ave Oakland 21 Calif
Wells Mfg Corp 250 Service Rd Three Rivers Mich
WELLSAW—Wells Mfg Corp
WELTRONARCH—Weltronic Co
Weltronic Co 19500 W Eight Mile Rd Detroit 41 Mich
Weltronic Induction Heating Corp—see Welduction Corp
Wen Products Inc 5808 Northwest Highway Chicago 31 Ill
Werner Co (R B) Inc P O Box 580 Greenville Pa
WESCO—Westinghouse Electric Supply Co
Wesix Electric Heater Co 390 First St San Francisco 5 Calif
West Instrument Corp 4363 W Montrose Ave Chicago 41 Ill
West Wind Corp 1800 Airport Way Seattle 4 Wash
Westchester Brickote Products Co Inc 1528 Williamsbridge Rd NY 61 NY
Western Electro-Mechanical Co Inc 300 Broadway Oakland 7 Calif
Western Gear Corp Electro Products Div 132 W Colorado St Pasadena 1 Calif
Western Insulated Wire Co 2425 E 30th St Los Angeles 58 Calif
Western Plastics Corp 1515 W Second St Hastings Neb
Western States Equipment Company—see Lightonics
Westinghouse Electric Corp P O Box 2278 Pittsburgh 30 Pa
Westinghouse Electric Corp Lamp Div Bloomfield NJ
Westinghouse Electric Corp Lighting Div 1216 W 58th St (P O Drawer 5817) Cleveland 1 Ohio
Westinghouse Electric Corp Standard Control Div Beaver Pa
Westinghouse Electric Corp Sturtevant Div Damon St Hyde Park Boston 36 Mass
Westinghouse Electric Supply Co 3 Gateway Center (Box 448) Pittsburgh 30 Pa
Westline Products Div Western Lithograph Co 600 E Second St Los Angeles 54 Calif
WESTON—Round (David) & Son Inc
Weston Instrument Div—see Daystrom Inc
Westron Corp 652 Hudson St NY 14 NY
WETOIL—Farrelloy Co
WEYCO—Young Electric & Mfg Co Inc
WHALE—Forsberg Mfg Co
WHEAT—Koehler Mfg Co
Wheat Laboratories—see Koehler Mfg Co
Wheatland Electric Products Co 500 Logan St Carnegie Pa
WHEEL-ABOUT—Rich (Phil) Fan Mfg Co Inc
Wheeler Electronic Corp 150 E Aurora St Waterbury 20 Conn
Wheeler Insulated Wire Co—see Wheeler Electronic Corp
Wheeler Mfg Co Ross Rd Ashtabula Ohio
Wheeler Reflector Co 275 Congress St Boston 10 Mass
Wheelock Signals Inc Branchport Ave Long Branch NJ
WHIRLCLAD—Polymer Corp
Whirlpool Corp Benton Harbor Mich
Whitaker (Douglas C) Co Inc 141 E Glenside Ave Glenside Pa
Whitaker Reel Mfg Co 3704 Jackson St Monroe La
White (O C) Sales Co 40 Green St Marblehead Mass
White-Rodgers Co 9797 Reavis Rd St Louis 23 Mo
Whitman & Barnes Div United Drill and Tool Corp 40600 Plymouth Rd Plymouth Mich
Whitney Blake Co 102 Pershing St New Haven 14 Conn
WHIZ—Speedex Mfg Co
WICK-O-LITE—North American Electric Lamp Co
Wide-Lite Corp PO Box 191 Houston 1 Tex
WIDE-SPREAD—Holophane Co Inc
WIDE-VUE—Simpson Electric Co
Wiegand (Edwin L) Co 7637 Thomas Blvd Pittsburgh 8 Pa
WIFE-SAVER—Simpson (Mark) Mfg Co Inc
WIL-GARD—Wilson Rubber Co
WIL-SON Mfg Co Cloverport Ky
Wilbur & Williams Co Inc 650 Pleasant St Norwood Mass
Wilde Drop Forge & Tool Co—see Wilde Tool Co Inc
Wilde Tool Co Inc Hiawatha Kans
Wilder Mfg Co Inc Mechanic St E Erie Railroad Port Jervis NY
Wiley Displays Inc—see Wiley (R & W) Inc
Wiley (R & W) Inc Dearborn & Bridge St Buffalo 7 NY
Wilkoff (M J) Co 823 Locust Pittsburgh 19 Pa
Willard Storage Battery Co—see Willard Storage Battery Div
Willard Storage Battery Div Electric Storage Battery Co 246-286 E 131 St Cleveland 8 Ohio
Williams (J H) & Co 400 Vulcan St Buffalo 7 NY
Williams (Hugh B) Mfg Co 8330 Lovett St (P O Box 7815) Dallas Tex
Williams (H E) Products Co 106 S Main St Carthage Mo
Wilmington Fibre Specialty Co New Castle Del
Wilmot Castle Co Box 629 Rochester 2 NY
Wilson (G C) & Co 1915 Eighth Ave Huntington W Va
Wilson (J A) Lighting & Display Inc 1502 Industrial Dr Erie Pa
Wilson Rubber Co 1200 Garfield Ave S W Canton 6 Ohio
Wincharger Corp E Seventh & Division St Sioux City 2 Iowa
WINCO—Wincharger Corp
WIND-ELECTRIC—Hirschman-Pohle Co Inc
WIND-O-VENT—Reed Unit-Fans Inc
Wind-Way Fan & Ventilator Co 531 St Joseph St New Orleans 12 La
WINDMAKER—Rich (Phil) Fan Mfg Co Inc
WINDOW WONDER—Rich (Phil) Fan Mfg Co Inc
WING-DING—Diamond Expansion Bolt Co Inc
Wing (L J) Mfg Co 303 N Stiles St Linden NJ
WING-NUT—Ideal Industries Inc
WINGFOIL—Wing (L J) Mfg Co
WINGJET—Wing (L J) Mfg Co
Winpower Mfg Co Newton Iowa
Winterburn Mfg Co P O Box 386 Putnam Conn
WIRE GLIDE—Electrical Fittings Corp
WIRE-LESS-COM—Simpson (Mark) Mfg Co Inc
WIRE-LUBE—Ideal Industries Inc
WIRE MIKE—Burndy Corp
WIRE-NUTS—Ideal Industries Inc
WIRE WATT—Ohmite Mfg Co
WIRED HEAT—Wesix Electric Heater Co
WIREDUCT—Wiremold Co
WIRELESSFONE—Simpson (Mark) Mfg Co Inc
WIRELESSTALK—Simpson (Mark) Mfg Co Inc
WIREMASTER—Champion DeArment Tool Co
Wiremold Co Hartford 10 Conn
WIREWA—National Electric Div
WIREWRAP—Taylor Electric Inc
Wirt Co—see Continental-Wirt Electronics Corp
WISCEL—Wisconsin Electrical Mfg Co Inc
Wisco Div Electric Storage Battery Co 1222 18th St Racine Wis
Wisconsin Carbon Corp—see Kirkwood Carbon Corp
Wisconsin Electrical Mfg Co Inc 1237 S Third St Milwaukee 4 Wis
Wisconsin Storage Battery Co—see Wisco Div
Wiss (J) & Sons Co 33 Littleton Ave Newark 7 NJ
WIZARD—General Control Co
Wodack Electric Tool Corp 4627 W Huron St Chicago 44 Ill
WOLMANIZED—Koppers Co Inc
WONDABAR—Virden (John C) Co
WONDER—American Pipe Bending Machine Co Inc
WONDERFLUX—American Silver Co Inc
WONDERLITE—Magni Flood Inc
WOOD BEAM—Neo-Ray Products Inc
Woodhead (Daniel) Co 15 N Jefferson St Chicago 6 Ill
Woodward Machine Co Lighting Div 4833 Elmhurst Detroit 4 Mich
WORK BULL—Massey-Ferguson Industrial Div
Work-O-Lite Co 522 Cortlandt St Belleville 9 NJ
WORKMAN—Ray-O-Vac Co
Workrite Mfg Co 612-620 Colorado Ave Santa Monica Calif
WORKSAVER—Yale & Towne Mfg Co

Worthington Corp Worthington Ave Harrison NJ
WRAP AROUND—PLM Products Inc
WRAP-CAP—Ideal Industries Inc
WRAP-IT-HEAT—Acra Electric Corp
Wrap-On Co 341 W Superior St Chicago 10 Ill
WRIGHT CIRCUIT—Square D Co Electric Controller & Mfg Div
Wright Hoist Div American Chain & Cable Co Inc Franklin & Hay Sts York Pa
WYCO—Wyzenbeek & Staff Inc
WYTELINER—Guth (Edwin F) Co
Wyzenbeek & Staff Inc 223 N California Ave Chicago 12 Ill

X

XIT—Iona Ventilator Co Inc
XL—Excel Fuse Co
X-L—Henderson Electric Co
X-PAN—National Lead Co
X-Ray Reflector Co—see Curtis Lighting Div
X S WALLGRIP—Star Expansion
X-SEAL—Allegheny Plastics Inc
X-TRACT-O—Trico Fuse Mfg Co
X-VAR—Fidelity Chemical Products Corp
XCEL—Xcelite Inc
Xcelite Inc Thorne Ave at Bank St Orchard Park NY
XDUCT—National Electric Div H K Porter Co
XELON—Times Wire & Cable Div
XTENSIONDUCT—National Electric Div H K Porter Co

Y

Y-ER-EAS—Electro Compound Co
YAK—Mercury Mfg Co
Yale & Towne Mfg Co 11000 Roosevelt Blvd Philadelphia 15 Pa
YAGER'S—Benson (Alexander R) Co Inc
YANK—Mercury Mfg Co
YARD LITE—Markel Electric Products Inc
Yardney Electric Corp 40-50 Leonard St New York 13 NY
Yardney Laboratories Inc—see Yardney Electric Corp
Yeats Appliance Dolly Sales Co 2124 N 12th St Milwaukee 5 Wis
Yellow Springs Instrument Co Inc P O Box 106 Yellow Springs Ohio
YEW—Yokogawa Electric Works Inc
Yokogawa Electric Works Inc 40 Worth St New York 13 NY
YOLOY—Youngstown Sheet & Tube Co
York Corp—see York Div
York Div Borg-Warner Corp Grantley Rd York Pa
York Ice Machinery Corp—see York Div
York Mfg Co—see York Div
YORKAIRE—York Div
YORKLITE—Perkins Battery Co
Yorkville Metal Products Co 627 Greenwich St New York 14 NY
Young Bros Co 1831 Columbus Rd Cleveland 13 Ohio
Young Electric & Mfg Co Inc 2134 Curtis Denver 2 Colo
Young Engine Corp P O Box 532 Canton Ohio
YOUNG MODERNS—Lightolier Inc
YOUNGSTOWN—Square D Co Electric Controller & Mfg Div
Youngstown Sheet and Tube Co P O Box 900 Youngstown 1 Ohio
YUKON—Perfeclite Co

Z

ZAMPA—Weiss & Biheller Merchandise Corp
Zell-Aire Corp Orrton Ave Reading Pa
Zellers Laboratories Heating Div—See Zell-Aire Co
ZENITH—Scranton Storage Battery Corp
Zenith Electric Co 155 W Walton St Chicago 10 Ill
ZEPHYR—Chester Hoist Div
Zerhickow (O) Co 15 Park Row New York 38 NY
ZERO START—Phillips Mfg Co Inc
ZEVA—Roche (Paul C) Co Inc
ZINC-SHIELD—Wilbur & Williams Co
Zinsco Electrical Products 729 Turner Los Angeles 12 Calif
Zinzeye Co—see Zinsco Electrical Products
ZIP-CLAMP—Hall (William) Co
ZIP-CLEAT—Hall (William) Co
ZIP-CLIP—Hall (William) Co
ZIP SPOT—Mid-States Welder Mfg Co
ZIPCORD—Kaiser Aluminum & Chemical Sales Inc
ZIPLITE—Kaiser Aluminum & Chemical Sales Inc
ZIPPER-ETTE—Mid-States Welder Mfg Co
Zippertubing Mfg Co 13000 S Broadway Los Angeles 61 Calif
ZIPSOL—Fidelity Chemical Products Corp
ZONELINE—General Electric Co Major Appliance Div Room Air Conditioner Dept
ZOREX—Adjustable Fixture Co

PRODUCT SELECTION DATA

Detailed information on electrical products

This section contains data presented by manufacturers of electrical apparatus and supplies, utilization equipment, components, tools and accessories. Descriptions include installation and application data, performance characteristics and specifications.

Bold-face type and the symbol (●) are used in the Product Directory to indicate the location of information on specific equipment in this section.

How to select a Remote Control Switch

Electrical engineers are increasingly incorporating Remote Control Switches into their wiring layouts and circuits. Remotes today are used not only for the instantaneous control of emergency equipment, where they are a *must*, but for safety, economy and convenience wherever light or power is being distributed over a wide area.

Selection of Type

The selection of the right remote for a particular application must be given some study, but basically there are only two factors which affect the selection of type: (1) the class of load: non-inductive, such as heaters and lighting; or inductive, such as motors; (2) the voltages of the systems used.

Mixed Loads

Where there are mixed loads, non-inductive load rating must not be less than the combined full-load currents nor less than 66⅔% of the maximum current to be interrupted.

Any connected motors should be evaluated on the basis of stalled rotor current, using the multiplier of six times motor current if the actual value is not known. These currents added to the non-inductive load current will establish the maximum current which the switch will have to interrupt. In specifying the switch capacity, give class of the load and the amount of the load which is to be controlled.

Why Mechanically Held

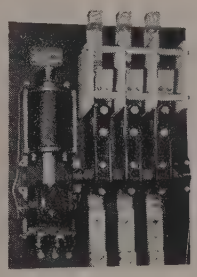
Another important selection-factor is that the remote control switch be mechanically held. Because it is essentially a feeder disconnect, the remote must be unaffected by line voltage conditions and respond only to control of the push buttons. ASCO mechanically held remotes insure against outages on vital circuits caused by momentary line voltage dips.

A detailed report on the advantages of ASCO remote control switches can be obtained by writing for new catalog 57-S2.

A selection of basic Remote Control Switches by ASCO

For Economy and Rugged Construction . . .

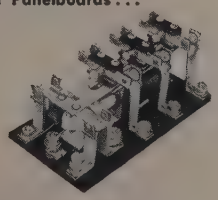
Use the Bulletin 920 — Up to 3 Poles, Single Throw, 30-75 Amps D-C, 30-200 Amps A-C. U.L. Approved to 600V A-C, 250V D-C. Recommended for all loads within its capacity range.



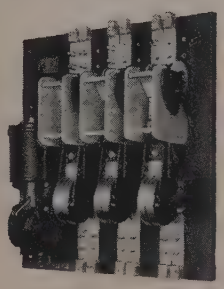
For Load Requirements Exceeding Capacity of the Bulletin 920 . . .

Use the Bulletin 910—Up to 4 Poles, Single Throw, 30-400 Amps, 250 volts, A-C.

For Small Panelboards . . .



Use the Bulletin 909 — Up to 5 Poles, Single Throw, 3 Poles, Double Throw, 30 Amps, 250 volts, A-C or D-C.

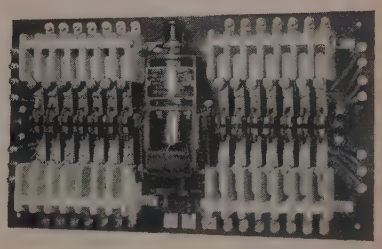


For High Capacity, Highly Inductive Loads . . .

Use the Bulletin 911—Up to 4 Poles, Single Throw, 30-1000 Amps, 600 volts, A-C, 250 volts, D-C.

For Multiple Pole Requirements . . .

Use the Bulletin 915—Up to 24 Poles, Single or Double Throw, 30, 60 and 100 Amps, A-C.



ASCO Electromagnetic Control

ASCO

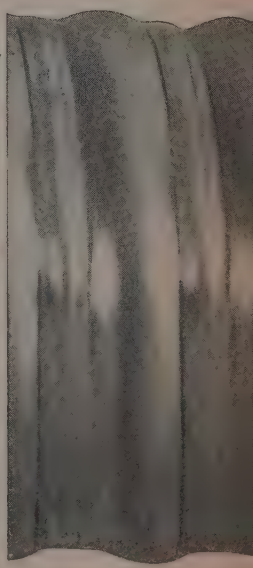
DEPENDABLE CONTROL BY Automatic Switch Co. 50-J HANOVER RD., FLORHAM PARK, N. J. • FRONTIER 7-4600 • AUTOMATIC TRANSFER SWITCHES • SOLENOID VALVES • ELECTROMAGNETIC CONTROL

American Steel and Wire
Division of
United States Steel

Columbia-Geneva Steel Division, San Francisco, Pacific Coast Distributors
Tennessee Coal & Iron Division, Fairfield, Alabama, Southern Distributors
United States Steel Export Company, Distributors Abroad

Cut corners with flexible USS Armorlokt Cable

Remember your last conduit job . . . all the time and work needed to install junction boxes, not for new circuits but just so the cable could be pulled around corners? And the longer the pull, the more boxes you needed. USS Tiger Brand Armorlokt Cable could have been installed in approximately one-half the time and eliminated all that expensive pipe fitting and bending. ■ Armorlokt installs as easily as ordinary cable—yet it protects as well as rigid conduit, and sometimes even better because Armorlokt is flexible and "rolls with a punch." You can install it anywhere . . . up, down, across walls, buried in the ground, suspended in trays or on cable rings, indoors or outdoors. Armorlokt can be installed in long lengths, because its flexible construction permits easy and quick bending around corners, I-beams, or any other obstruction. And you can easily splice into Armorlokt Cable, anywhere along the entire length. ■ Armorlokt has a higher current-carrying capacity than the same size conductor in conduit because heat is quickly dissipated, not trapped inside. Corrosive atmospheres are no problem. Armorlokt is available with galvanized steel, stainless steel, aluminum or bronze armor. It's also available with an Ampyrol (PVC) jacket, in black or colors for easy identification. You can order Armorlokt with almost any kind of insulation, including varnished cambric, rubber, or asbestos up to four inches in diameter, rated 15,000 volts. ■ There's a standard USS Tiger Brand cable for every special job. For the complete story on Armorlokt Cable or any other type cable, call our nearest sales office or write American Steel and Wire, Dept. 1265, Rockefeller Building, Cleveland 13, Ohio.



USS, Armorlokt and Ampyrol are registered trademarks

Current news reports

WHAT'S HAPPENING IN ELECTRICAL SERVICES?

Highlights: A dry-type transformer that cuts installing time from 90 to 40 minutes. A motor control center that saves space. These examples demonstrate the extra value that is standard with Allis-Chalmers . . . the greater efficiency and the added productivity which are yours when you buy A-C products, systems and services. Call your nearby Allis-Chalmers office for details or write Allis-Chalmers, Industries Group, Milwaukee 1, Wisconsin.

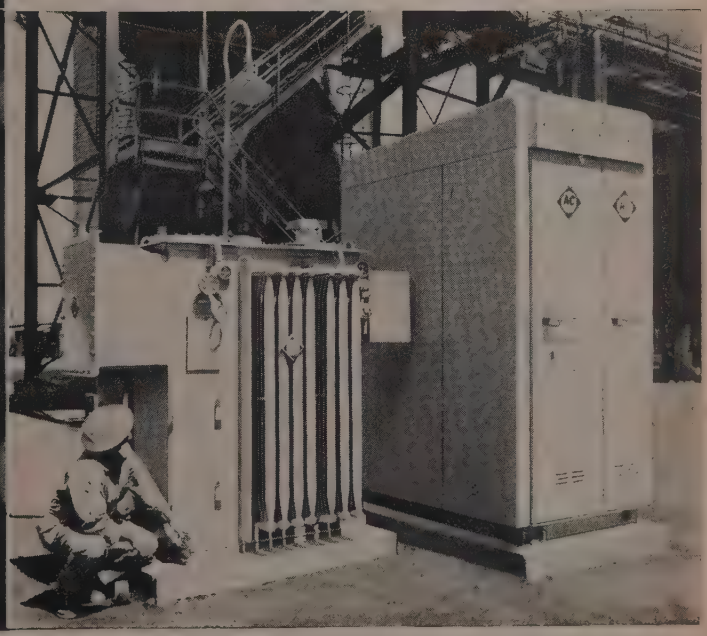
Lowest height, easiest access 5-kv metal-clad switchgear on the market. Just 72 inches high, you get eye-level instrumentation, shoulder-height accessibility of component parts. Other outstanding advantages: front-accessible current transformers; maximum compartmentation and dead-front construction for greater safety; full-panel metering; rapid, one-stroke breaker insertion. Choice of Allis-Chalmers stored energy or solenoid operated circuit breakers.

Low cost answer to an outdated electrical syst An Allis-Chalmers unit substation. It distributes power at the center of the load. Voltage drop and c ductor losses are minimized . . . secondary wire to chines is shorter and less expensive. And there's space problem! Mount an Allis-Chalmers unit substa anywhere, in a corner of the production floor, on conies, in the basement. Metal enclosures eliminate n for vaults — and provide attractive appearance.

Curvacore, Super-Seal, Poxeal and Chlorextol are Allis-Chalmers trademarks.

Cut installing time in half with new, whisper-quiet dry-type transformers! Now 35% smaller, lighter, this new design eliminates common installation problems. Unique 3-piece case makes handling, wiring go like clockwork. You'll install them in 40 minutes instead of the usual 90 minutes. Every known factor in subduing noise has been incorporated . . . and exclusive *Curvacore* construction lowers exciting current, core losses. Requires *no* special insulating cable for hookup.

Control centers cut costs . . . You save space, simplify wiring and reduce inspection and maintenance expenses with new A-C low-voltage motor control centers. Plug-in terminal blocks and draw-out construction cut inspection and maintenance time by making it quick and easy to withdraw or remove control units. Pushbuttons and pilot lights on removable frames eliminate failures common with hinged wiring. Special connectors make it impossible for bus connections to loosen.

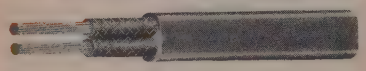
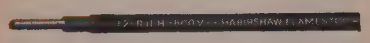
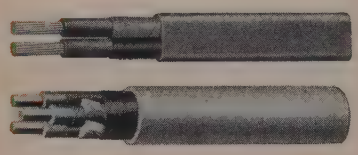
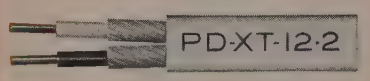
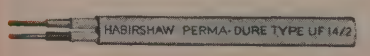
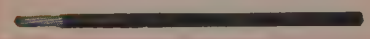


Acid drips, but open motor's efficiency never drops: This *Super-Seal* open motor replaced a TEFC unit driving a pump in a vanadium and uranium extracting process. Though constantly subjected to drippage of a sulphuric acid and organic phosphate mixture, it keeps right on running. Its *Poxeal* insulation defies corrosives, moisture and contaminants. Open design gives a service factor of 1.15 . . . provides reserve capacity to meet sudden overloads.

Lower first cost is just one of many advantages of this packaged unit substation. Simplified engineering, planning and purchasing reduce installation and maintenance costs. These A-C units provide reduced power losses, better regulation and flexibility for expansion. Factory-assembled, wired and tested to meet all standards. Transformer types available to fit your needs include oil-filled, *Chlorextol* liquid-filled, dry-type and sealed dry-type units.

ALLIS-CHALMERS A-1478

Index of Phelps Dodge

Wires and Cables	Type Letter	Trade Name or Designation	Maximum Operating Temperature	USE
	ACV	Armo-Lok	85 C (185 F)	Dry Locations
	None	Armo-Lok	85 C (185 F) High Voltage	General Purpose: Consult manufacturer for specific applications
	W	Portable Power Cable	75 C (167 F)	Mining Machines, Dredges, Shovels, and similar portable applications
	G		Low Voltage	Pennsylvania Dept. of Mines Flame Resistance Approval P-114. U. S. Bureau of Mines Listing P-114-BM.
	SHD		85 C (185 F) High Voltage	
	RHW	Flamestop Heat and Moisture Resistant	75 C (167 F)	Dry and Wet Locations
	RHH	Flamestop Heat-Resistant	90 C (194 F)	Dry Locations
	RHL	Heat Resistant Rubber Lead	75 C (167 F)	Wet Locations and other Special Conditions
	NM	PD-X Fibrous-covered, Nonmetallic-Sheathed Cable	60 C (140 F)	For Wiring Houses, Rural Buildings, Small Stores, and Shops.
		PD-XT Thermo-plastic-covered, Nonmetallic-Sheathed Cable	60 C (140 F)	For Wiring Houses, Rural Buildings, Small Stores and Shops
	UF	Perma-Dure Nonmetallic-Sheathed Cable	60 C (140 F)	UF: Underground Feeder and Branch Circuit Cable for Direct Burial.
	UF-NMC			NMC: For Interior Wiring in Moist or Corrosive Locations.
	THW	Habirdure Thermo-plastic insulated	75 C (167 F)	Dry and Wet Locations
	TW		60 C (140 F)	Dry and Wet Locations
	TF		60 C (140 F)	Fixture Wire
	TW	Petro-Dure Thermo-plastic Insulated Nylon Jacketed	60 C (140 F) 30 C (86 F)	Dry and wet locations and where exposed to mineral oil Where exposed to liquid gasoline and gasoline vapor.

PHELPS DODGE COPPER PRODUCTS CORPORATION

Wires and Cables

Wires and Cables	Type Letter	Trade Name or Designation	Maximum Operating Temperature	USE
	TW	Habirdure (9T)	60 C as TW 90 C as Appliance Wiring	NEC Type TW Bldg. Wire—60°C Appliance Wiring—90°C in air or 60°C in water or oil
	None	Habirdure Appliance Wire	105 C (221 F) IN AIR 80 C (176 F) IN OIL	Appliance Wiring
	SE	Service Entrance Type SE — Style U Unarmored	75 C (167 F)	Service Entrance or Combination Service Drop & Service Entrance
	SD	Service Drop Type SD	60 C (140 F)	Service Drop
	USE	Service Entrance Type USE	75 C (167 F)	Underground Service Entrance, Direct Burial.
	V	Varnished Cloth Braided	85 C (185 F)	Dry locations only. Smaller than No. 6 by special permission.
	VL	Varnished Cloth Lead	85 C (185 F)	Wet or Dry locations. Smaller than No. 6 by special permission.
	None	Habirduct Habirprene	75 C (167 F) Low Voltage	General Purpose for Direct Burial, Aerial, Conduit and Underground Duct Installations.
		Habirite Habirprene	85 C (185 F) High Voltage	
	S or SO	Hard Service Cord	60 C (140 F)	Pendant or portable extra hard usage in damp locations; SO for oil resistance
	SJ or SJO	Junior Hard Service Cord	60 C (140 F)	Pendant or portable hard usage in damp locations; SJO for oil resistance
	SP	All Rubber Parallel Cord	60 C (140 F)	For use in pendant or portable applications in damp locations not subject to hard usage

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EXPLOSION-PROOF FITTINGS

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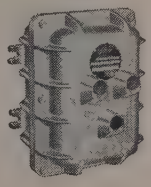


MOTOR STARTERS

DISCONNECT SWITCHES

LIGHTING FIXTURES FOR HAZARDOUS LOCATIONS

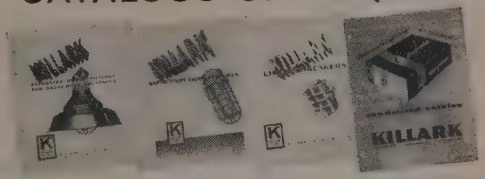
Explosion-Proof

Vapor-Proof

Dust-Tight

LIGHTING FIXTURES—SPECIAL LOCATIONS

CATALOGS ON REQUEST



Send for Illustrated Literature

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Vandeventer & Easton, St. Louis 13, Mo.
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- ☐ Explosion-Proof Fittings Catalog No. 13
- ☐ Condensed Catalog No. 59
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- ☐ Circuit Breakers Catalog No. 17

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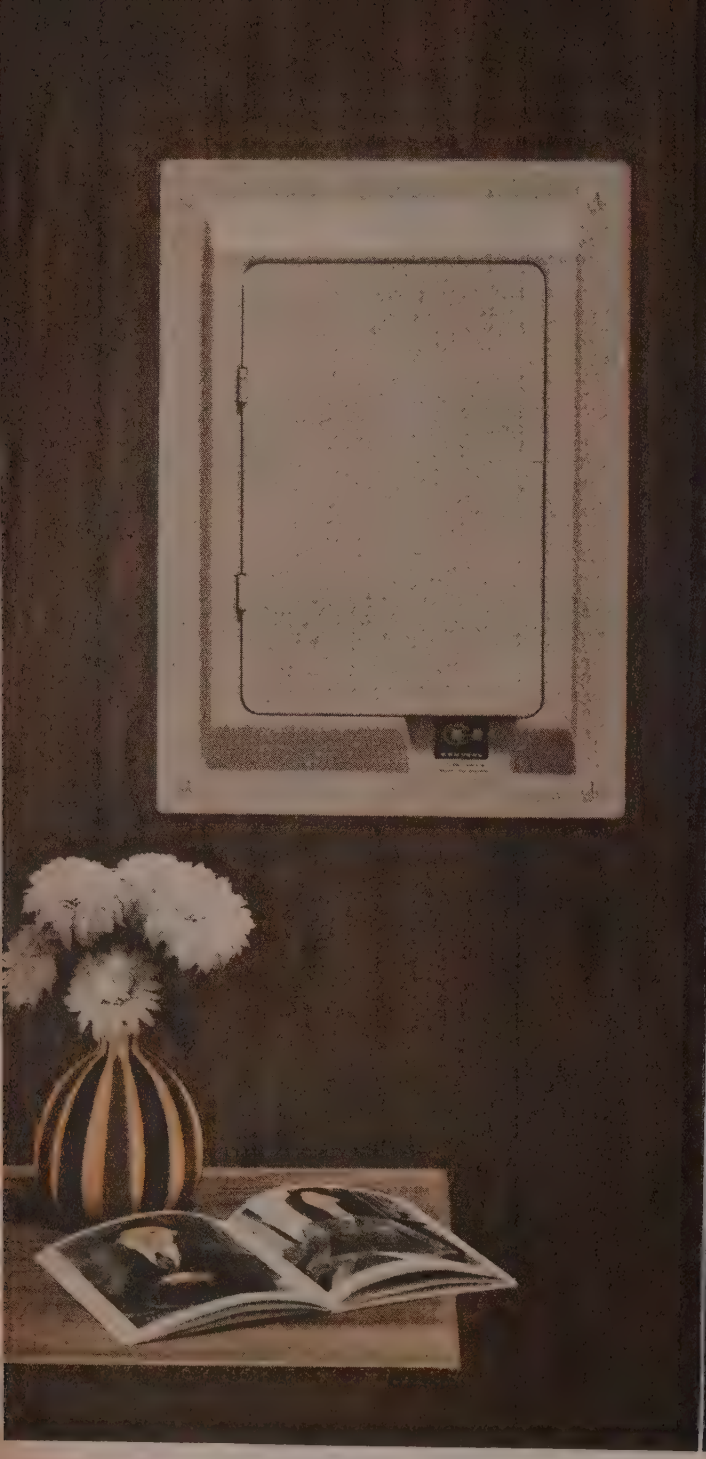

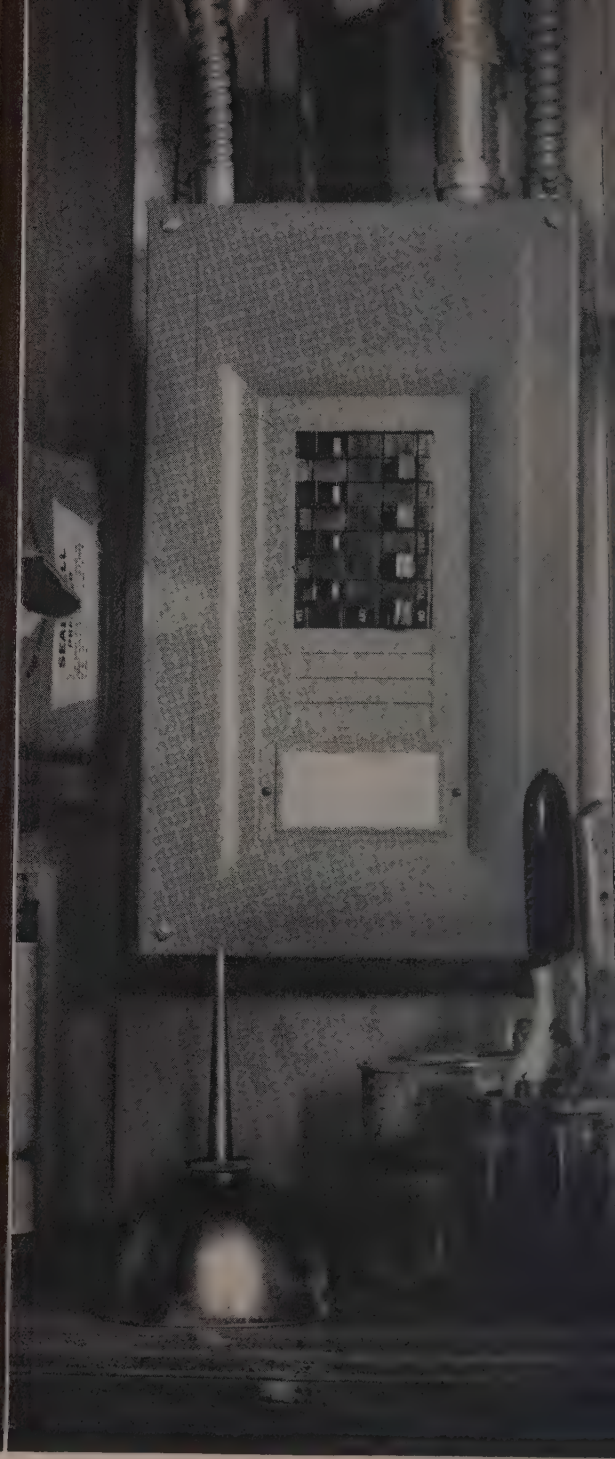

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Why settle for an old-fashioned "basement gray" box?

Get this new, smartly-styled safetybreaker...it doesn't cost a nickel more

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Here's a bonus in beauty and protection that gives you—and your customers—extra features at no extra cost.

Modern appliance styling lets you show how good your wiring job is. This soft sandalwood finish *belongs* upstairs, convenient to the kitchen, saving you on those heavy wiring runs.

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Inside as superior as the outside. Won't rust, won't corrode because every operating part is either stainless steel or heavily plated. Double protection with magnetic trip for short circuits *and* bimetal trip for sustained overloads. Easier to install with plenty of wiring room, no knuckle-skinning wire guides.

Want to know more about Cutler-Hammer's New Safetybreaker? Write for free 36-page Safetybreaker Selection Guide. Better yet, see your Cutler-Hammer distributor and let him show you personally.

What's new at Cutler-Hammer? This new Safetybreaker is typical of the *better* products you'll be getting from Cutler-Hammer . . . results of new engineering talent . . . new facilities . . . a new creative atmosphere at every level.

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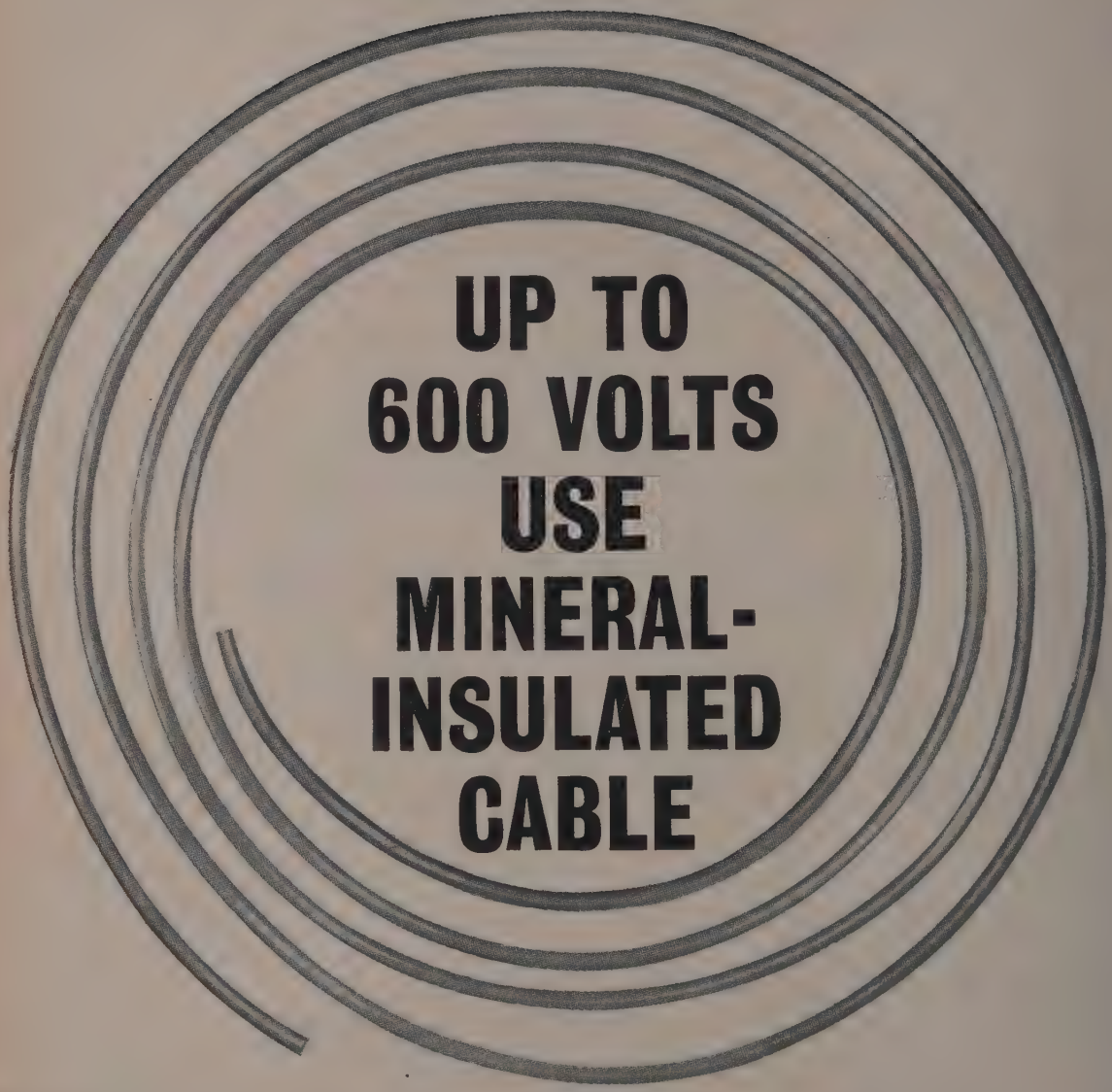
CONTROL



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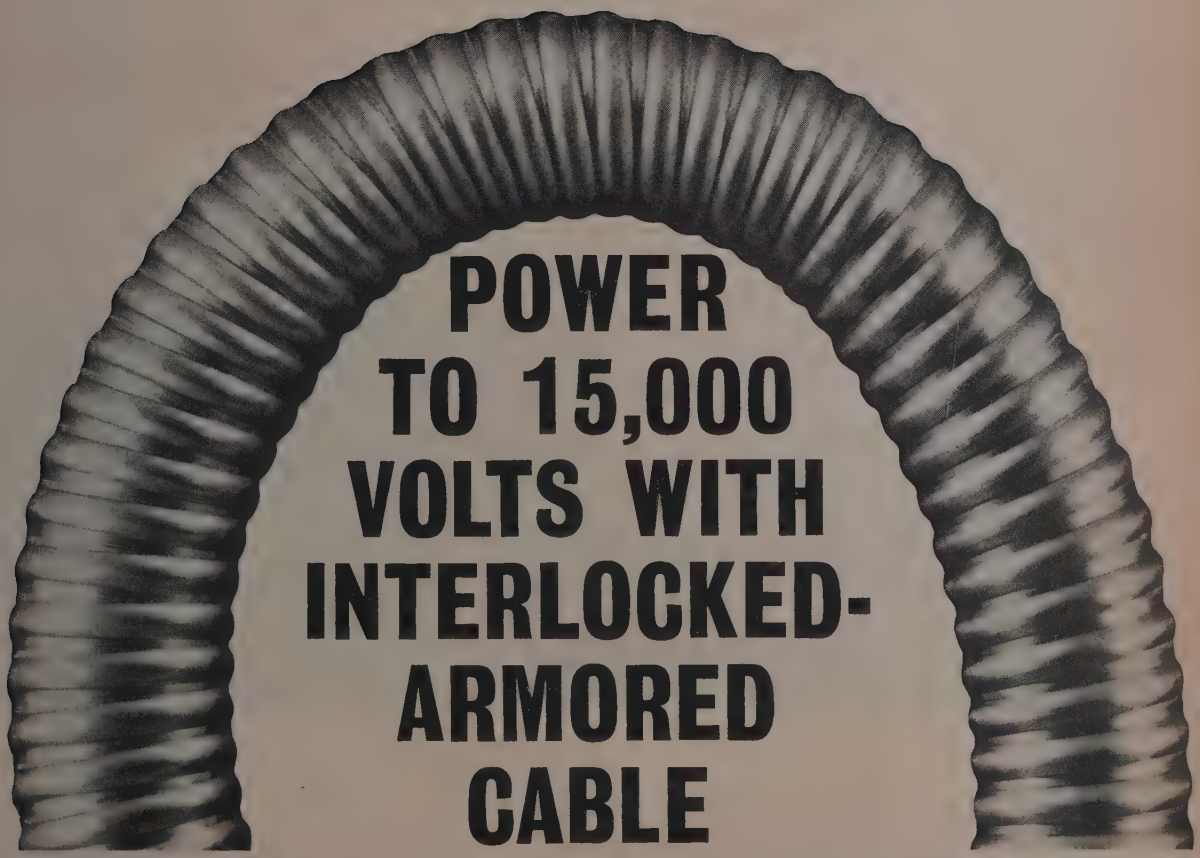

Protect your power cable with Interlocked-Armor, indoors or out... for any above ground installation. Interlocked-Armored Cable is flexible and the contractor installs it without conduit or pullboxes. For service up to 15,000 volts—specify General Cable Interlocked-Armored Cable.

■ Be sure you get quality, economy and flexibility in your cable installations. Have your electrician or contractor specify Interlocked-Armored and MI Cable by General Cable Corporation, 730 Third Avenue, New York 17, N.Y.

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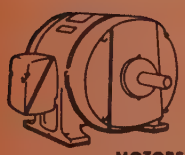
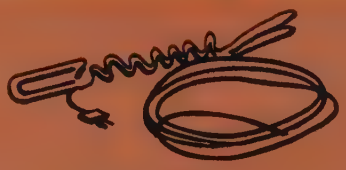
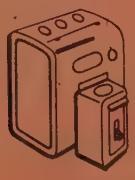

MOTORS

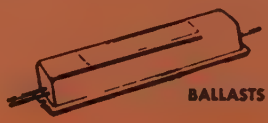
FUSES


WIRE AND CONDUIT

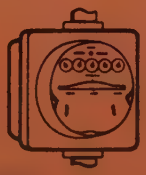
ELECTRICAL HEATING


CONTROL

WATER COOLERS


BALLASTS

INSTRUMENTS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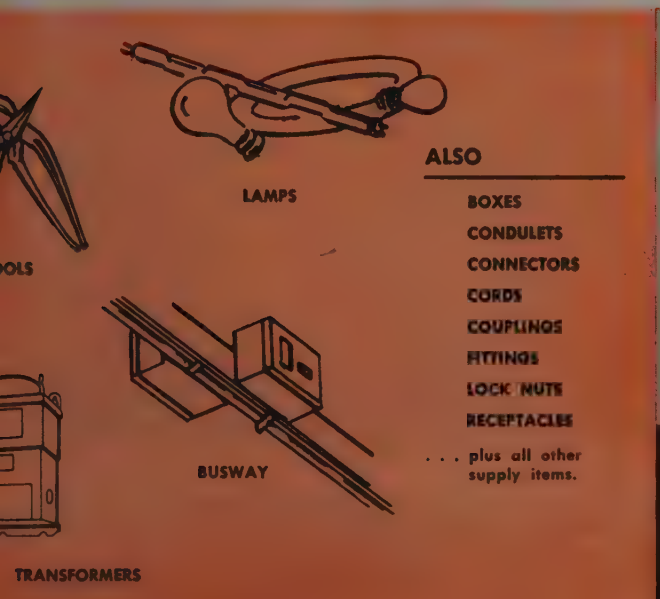

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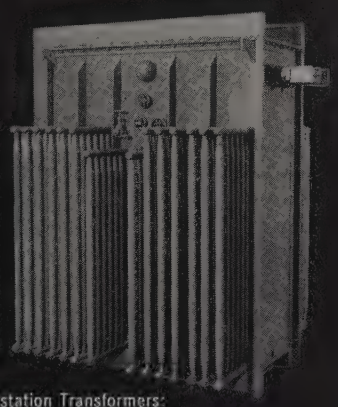
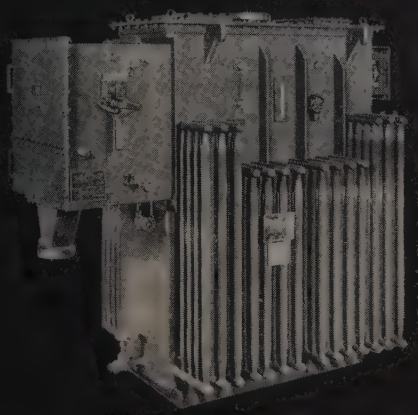
Substation Transformer
Core and Coil Assemblies



Unit Substation Transformers:
Mineral Oil and Askarel Immersed
Ventilated Dry-Type and Inert Gas Sealed

Station Type Transformers:
Mineral Oil and Askarel Immersed



Network Transformers:
Mineral Oil and Askarel Immersed

For complete information, request literature on specific types of Niagara Transformers

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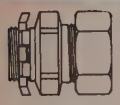
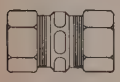


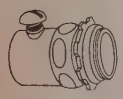
Compression Type Raintight E.M.T. Connectors — Available in sizes: ½", ¾", 1", 1¼", 1½", 2"



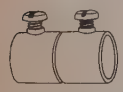
Compression Type Raintight E.M.T. Couplings — Available in sizes: ½", ¾", 1", 1¼", 1½", 2"

Snap-Strap for E.M.T.—Available in sizes: ½", ¾", 1", 1¼", 1½", 2"

Blackhawk Offset E.M.T. Connectors — Available in sizes: ½", ¾", 1"



Set Screw Type E.M.T. Connectors — Available in sizes: ½", ¾", 1"



Set Screw Type E.M.T. Couplings — Available in sizes: ½", ¾", 1"

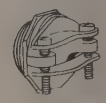
Blackhawk's Set Screw Type EMT Fittings are precision made of steel. Large captive screws. Bright zinc finish. Truly the speed type fitting that contractors demand.

CABLE CONNECTORS

"Universal" two screw and locknut connectors. Available in sizes: ⅜", ½", ¾", 1", 1¼", 1½", 2"

Watertite Connectors for Service Entrance Cable. Available in 1" and ¾" sizes.

Non-Watertight Connectors. Available in sizes: ¾", 1", 1¼"



Service Entrance Elbow. Available in sizes: ½", ¾", 1", 1¼", 1½", 2"

Slip Fitter Service Entrance Cap. Available in sizes: ½", ¾", 1", 1¼", 1½", 2", 2½", 3", 3½", 4"

HOLDING DEVICES

Conduit Hanger. Designed to hold thinwall and rigid conduit. ¼" hole in the base permits use with toggle bolt, wood screw or anchor. Complete line of sizes.

Beam Clamp. Complete with case hardened set screw. Fits up to ½" thick beam flange. ¼-20 tapped holes.

540 One Piece Box Support. Provides rigid, unified support. Easy to install. The first and finest.

560 Bar Hanger. Fastest, easiest, neatest most economical way to hang all ceiling light fixtures. Available with or without fixture stud. Used between joists from 12" to 18" — 18" to 26". Made of heavy gauge steel. Adjustable to required spacing. No notching necessary.

SERVICE ENTRANCE MAST ASSEMBLY & ACCESSORIES

Offset Reducer.

Service Entrance Mast. Available for 1¼", 1½", 2", 2½", and 3" pipe.

Slip Fitter Head.

Neoprene Synoflashing Unit.

Mounting Bracket. Fits all size pipe from 1¼" to 3".

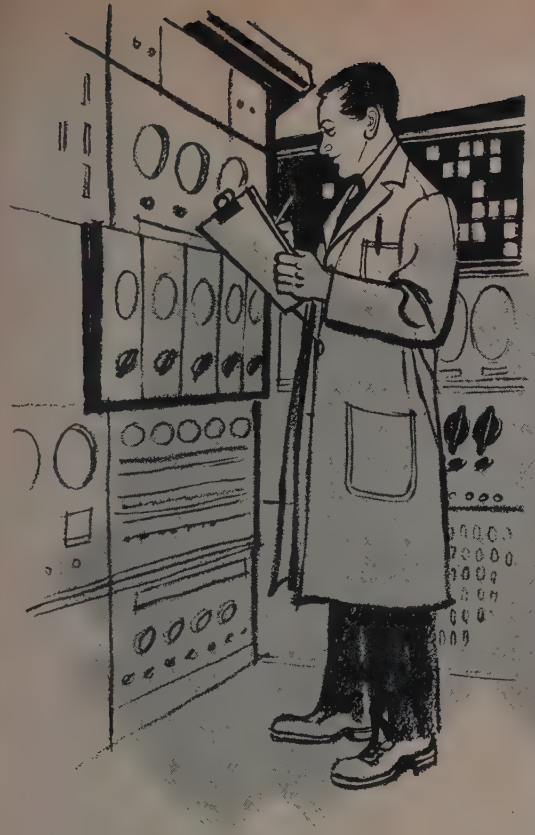
Insulators

Immediate delivery from adequate stocks to electrical wholesalers only. Write today for Blackhawk's complete catalog of electrical fittings and specialties.

Blackhawk Industries

Blackhawk Industries, Dubuque, Iowa

Where the new ideas come from



from small electronic wires TO *multi-conductor high-voltage cables*

HATFIELD HAS IT!

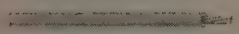
For every wiring need, Hatfield not only has a complete line of dependable wire and cable, but has it **when** you need it for immediate shipment **where** you need it. A local phone call in your area is all that's necessary to arrange overnight shipment of any size, type, color, or quantity from the more than 1500 items stocked by Hatfield's nation-wide network of warehouses and distribution centers. For over half a century, the electrical construction industry has known that for **complete selection** as well as quality and service... HATFIELD HAS IT!

HATFIELD WIRE & CABLE

Continental

DIVISION OF CONTINENTAL COPPER & STEEL INDUSTRIES, INC.

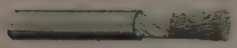
Plants: Hillside • Union • Linden / Executive Offices: Hillside, N. J.



1. MACHINE TOOL WIRE

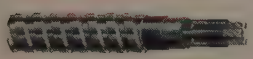
2. CONTROL CABLE

3. PORTABLE POWER CABLE



4. ELECTRONIC & COMMUNICATION WIRE

5. SHIPBOARD CABLE



6. INTERLOCKED ARMOR CABLE

7. HIGH VOLTAGE POWER CABLE

8. HIGH VOLTAGE MULTI-CONDUCTOR CABLE

What are your wire and cable needs? Circle the numbers that correspond to your requirements and the illustrations at the left... or let us know your special needs. Hatfield has it and will send the data immediately.

1 2 3 4 5 6 7 8 other_____

NAME_____

COMPANY_____

ADDRESS_____

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...we offer a complete line of improved MEGGER® Insulation Testers

Even the great corps of electrical men who have known and depended on Megger Testers for as long as 50 years will find important and useful new refinements in these most sturdy and reliable of instruments.

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RECTIFIER-OPERATED
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TWO-VOLTAGE

Megohm scale ÷ 1 and ÷ 10, Ohm scale and Capacitance Discharge on one selector switch or the basic megohm scale only.

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*Only one of a complete line. For additional information, write for catalog.

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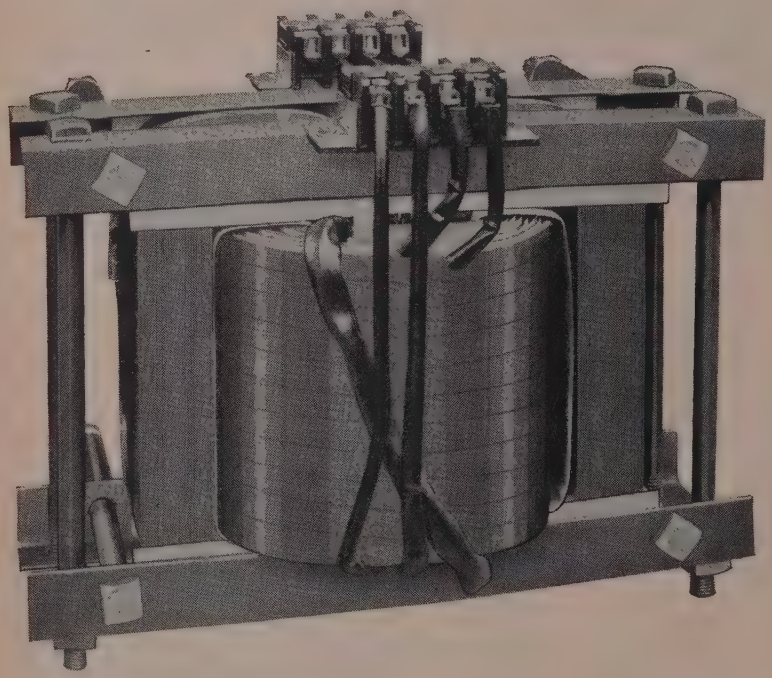
DONGAN
QUIET DRY TYPE
TRANSFORMERS

Dongan has specialized in the manufacture of dry type transformers for more than 50-years. This length of service to the electrical industry assures you of high quality, dependable transformers. Carefully built to your requirements, they will give long, quiet service.



DONGAN DRY-TYPE TRANSFORMERS are made in both class B 80° Cent. Rise and Class H 150° Cent. Rise. Single phase transformers, 25 V.A. to 100 KVA; three phase, 3 KVA to 300 KVA. Suitable for indoor or outdoor applications. Designed for wall or platform mounting. All have roomy wiring compartments.

Sizes 5KVA and larger feature tap-changing and voltage-changing terminal board equipped with solderless connectors for speed hook-up. Built to meet or exceed NEMA specifications.

Dongan also makes transformers for-signaling-machine tools-control-back and boost-high voltage secondary for oil and gas burners-neon signs.

DONGAN ELECTRIC MFG. COMPANY

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Here's why you get superior performance FROM FURNAS CONTROLS

. . . Furnas Magnetic Starters feature advanced design for superior performance and longer life. Standardized design reduces parts inventory and provides quick and easy field modification.

- **Dual Voltage 110-220 or 220-440 Volt Coils reconnectable on the job. Magnet features just one moving part.**
- **Non-tracking Contact Block is impact resistant. Completely visible and front removable silver-cadmium oxide contacts.**
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Contactor

Drum Control

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FURNAS ELECTRIC COMPANY
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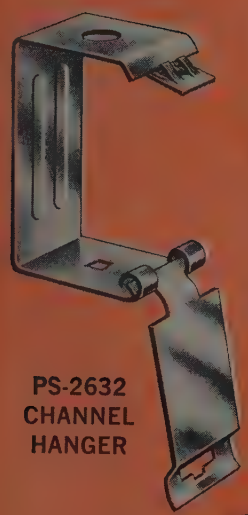
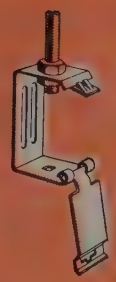
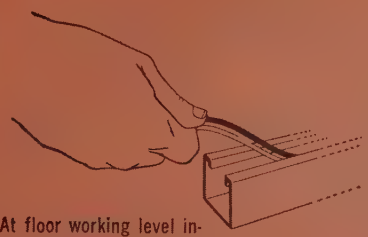
Now... the fastest, easiest way to hang raceway channel...



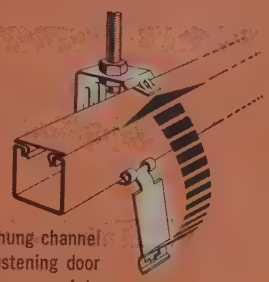
PS-2632
CHANNEL
HANGER



1. Suspend and align PS-2632 Channel Hanger from threaded rod at pre-determined level.

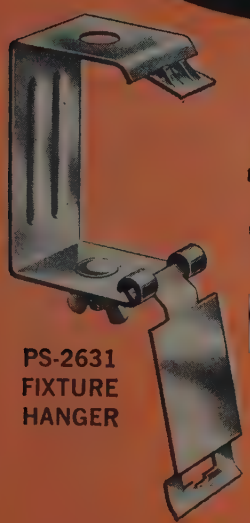


2. At floor working level install wiring in channel raceway.



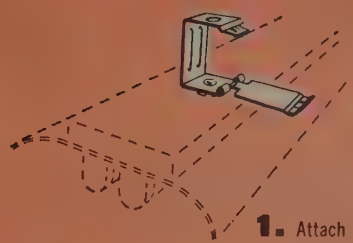
3. Lay raceway into pre-hung channel hanger. Close snap fastening door which securely locks raceway into position.

POWER-STRUT

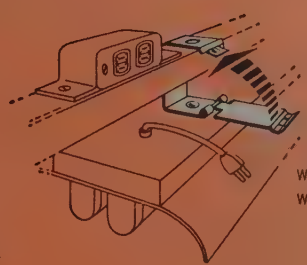


PS-2631
FIXTURE
HANGER

...and fluorescent fixtures...

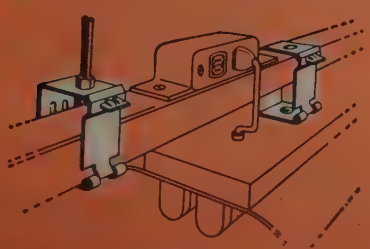


1. Attach PS2631 Fixture Hanger to fixture with quick assembly wing-nut leaving door open.



2. Hook fixture over raceway. Close snap fastening door which securely locks fixture into position. Plug in fixture.

3. Complete installation in minutes. No screws, bolts or cotter pins to lose.



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has 24 pages packed with money saving framing and electrical support ideas. Write for it today.

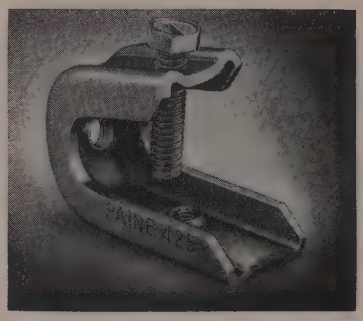
VAN HUFFEL TUBE CORPORATION • WARREN • OHIO

PAINE Adds A New, More Secure Washer To Their Expanding Line Of Quality Products

#475 Bar Joist Hanger Washer Is Ideal For Outlet Boxes, Clamps, Threaded Rods, Etc.

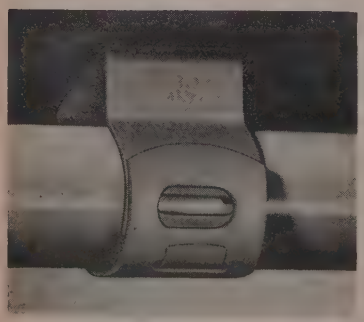
Paine's new washer is a simple, inexpensive and secure method for fastening all kinds of electrical devices to tubular or angle iron web joists. The new design prevents slipping, holds tighter because of "gripper" edges. Comes in two hole sizes, 1/4" and 3/8", packed 100 to a box. Contractor-originated, this new Paine product is a must for all types of industrial, or commercial building projects.

PAINE'S JUNIOR & SENIOR BEAM CLAMPS



Paine's Beam Clamps are ideal for securing conduits, switchboxes, pipes, and other electrical fastening or hanging devices onto "I" beams, ceiling channels, web joists, or building framework requiring lightweight, flush-mounted fastening. Excellent for holding conduit pipe above false ceilings. Senior size features case-hardened, hexagon-headed, slotted cup-pointed screw head. Handles all heavy duty applications.

Try Paine's Liberty Conduit Clamp



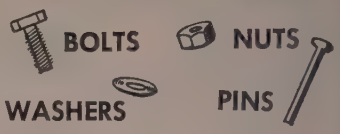
Designed for fast, secure hanging and fastening of thin wall conduit. One-piece unit has unique locking device. Eliminates need for nuts and bolts. Only standard electricians' pliers, screw-driver needed. Flat, smooth fastener—no sharp edges. Saves time and work.

THE PAINE COMPANY
61 Westgate Road, Addison, Illinois

the best craftsmen always take

PAINE'S

You Don't Need



or Special Tools to install

Cable Support Systems

Power circuits . . . process tubing . . . piping . . . control cables . . . are better, faster, more economically supported with Chalfant engineered systems.

Exclusive crimp-type splice plates securely join Chalfant trays without the need of bolts, washers, nuts or pins. This is only one of the features that drops installation time way down over conventional installation methods.

Chalfant uses Aluminized steel to make Trays and Splice Plates. It's a high quality, longer lasting, stronger material that is outstanding in performance yet lower in price.

You'll be years ahead by specifying Chalfant Aluminized Steel Cable Racks for your jobs to . . .

SAVE . . .
15% on Material
40% on Installation

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Chalfant PRODUCTS CO. Inc.
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CRESCENT

OVER 75 YEARS EXPERIENCE

Insulated Wires and Cables

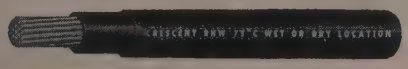
Pictured and described here are just a few of the many wires and cables that are made by CRESCENT.

ABC ARMOUR CABLE

Has prefabricated breaking lines which make installing easier, quicker and safer. A flattened bonding wire in contact with the underside of each convolution of the armor assures a permanent low resistance of armor.

SYNTHOL BUILDING WIRE-TYPE THW

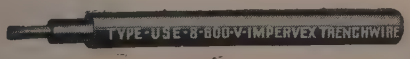
Rated for 75° C operation in both wet and dry locations. Its smaller diameter permits greater carrying capacity for rewiring conduits with overloaded feeders.



BUILDING WIRE—TYPE RHW

Brad or Neoprene covered

Highest quality insulation, for use in both WET and DRY locations at 75° C.



IMPERVEX TRENCHWIRE—TYPE USE-RR

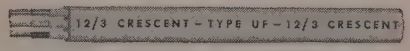
Single conductors for direct earth burial. Has a heavy Neoprene jacket over the rubber insulation. Provides low cost, permanent underground cable installation.

STEEL TAPED PARKWAY CABLE

Designed for direct earth installation without additional protection. All standard types regularly supplied and special type cables made to customers' specifications.

IMPERIAL PORTABLE POWER CABLE

Illustration shows Type SH-D 5000 Volt Trailing Cable for supplying power to electric shovels, dredges, etc. Covered with extremely tough Neoprene jacket.



TYPE UF AND TYPE NMC

Used for direct earth burial as an underground feeder, also used for branch circuit wiring in damp or corrosive locations.

CRESFLEX

Most suitable, lowest cost for rural, residential and farm buildings. Clean, gray paint finish.

SERVICE CABLES—TYPE SE

Both Style A (armored) and Style U (unarmored) are approved by Underwriters' Laboratories as service entrance cable and may be run down the side of a building without additional protection. It is tamper-proof, flexible and lightweight, moisture-resistant and flame-retarding.

NEOPRENE CRESCORD

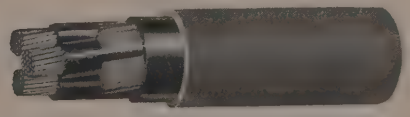
Heavy duty, oil-proof portable cord, Underwriters' Laboratories Type SO.

HYVOLT SHIELDED POWER CABLE

For use on power circuits from 5 to 15 KV in conduits or for direct burial.

INTERLOCKED ARMOR POWER CABLE

Provides a flexible, metal-enclosed method of wiring for power.



VARNISHED CAMBRIC LEAD ENCASED CABLE

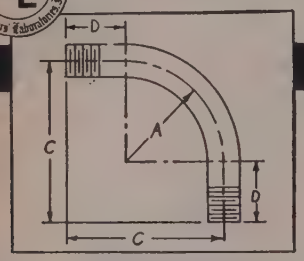
Varnished cambric insulation has high dielectric strength and long life. Not affected by oils and greases. This cable is supplied with lead sheath for wet locations or weatherproof braid for dry locations.

CRESCENT INSULATED WIRE & CABLE CO.

TRENTON, 5, N. J.

SIZES OF SPECIAL

LARGE RADIUS 90° ELBOW



radius "A" in inches	offset "C"	straight end "D"	length unbent	pipe sizes
12"	1'9"	9"	3'0"	1"-2½" inc.
15"	2'0"	9"	3'6"	1"-3" inc.
18"	2'4"	10"	4'0"	1"-3½" inc.
24"	2'11"	11"	4'11"	1"-4" inc.
30"	3'5"	11"	5'9"	1"-5" inc.
36"	3'11"	11"	6'6"	1"-6" inc.
42"	4'6"	12"	7'6"	1"-6" inc.
48"	6'0"	12"	8'4"	1"-6" inc.

Also available 45°, 30° and 60°. All are U.L. approved.

Elbows

90° and 45°

have smooth, work-speeding raceways

Conduit of Columbus elbows are U.L. approved. They are available in sizes ½" to 6". Sizes ½" to 2" are conveniently cartoned and all are shipped promptly from factory or from one of ten strategically located warehouses.

Nipples

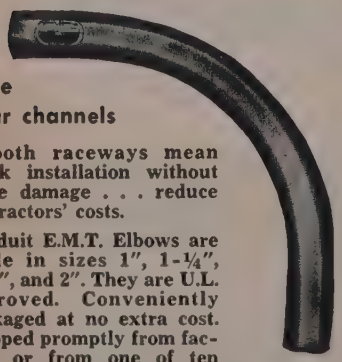
for convenient, money-saving connections

Conduit hot-dipped galvanized nipples are carefully threaded and chamfered, rigidly inspected and U.L. approved. Available in all sizes for prompt shipment from factory or ten strategically located warehouses. Sizes: ½" x close to 2" x 6" are all attractively packaged. Larger sizes 2½" to 6", in various lengths, also available.

Specify these Columbus conduit fittings

...look for the UL Label

EMT Elbows

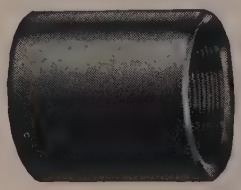


have clear channels

Smooth raceways mean quick installation without cable damage . . . reduce contractors' costs.

Conduit E.M.T. Elbows are made in sizes 1", 1-¼", 1-½", and 2". They are U.L. approved. Conveniently packaged at no extra cost. Shipped promptly from factory or from one of ten strategically located warehouses.

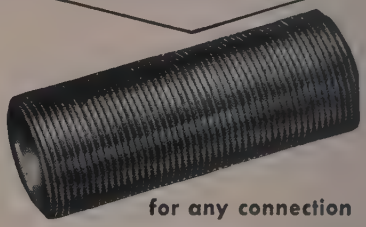
Couplings



for right—tight connections

Accurate tapping, careful chamfering and rigid inspection combine to give users completely satisfactory installations. Conduit Couplings are hot-dipped galvanized or black enameled . . . are available in all sizes from ½" to 6". Sizes ½" to 2" are conveniently packaged at no extra cost. Shipped promptly from factory or from one of ten strategically located warehouses.

Running Thread



for any connection

Conduit running thread is furnished in convenient 3' lengths in three finishes: raw black, electroplated and hot-dipped galvanized. Your orders can be shipped promptly from the factory or from one of ten strategically located warehouses.

Sold only through recognized wholesalers

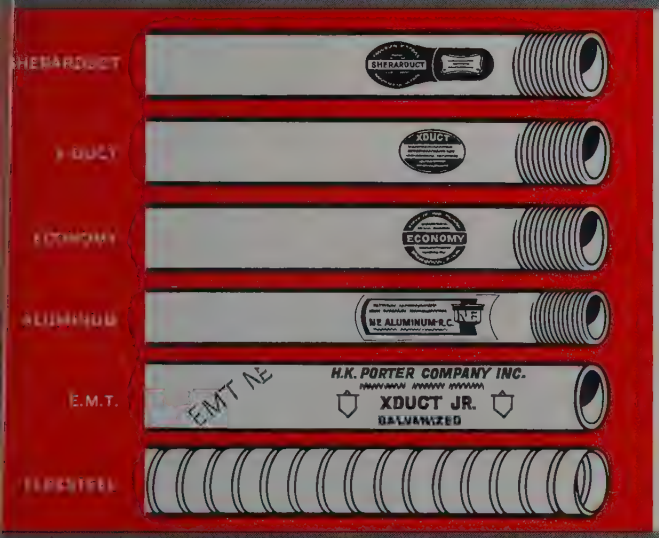
Columbus

BRAND

CONDUIT FITTINGS

CONDUIT PIPE PRODUCTS COMPANY — COLUMBUS, OHIO

NATIONAL ELECTRIC is the Speedy way to PUT POWER IN PLACE



CONDUIT

National Electric Sherardized conduit is galvanizing at its best. Not just a dip, zinc is actually alloyed with the steel. In addition, NE conduit is available with the additional protection of MVC-1 poly-vinyl coating . . . in standard green plus *your choice of five colors!* All NE protective coatings are applied after threads are cut.

Conduit diameters: ½ to 6-inches. E.M.T. diameters: ½ to 2-inches. Flexsteel diameters: 5/16 to 3-inches.

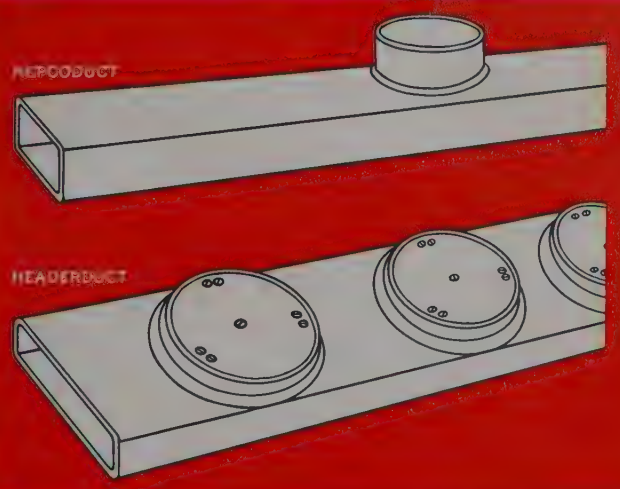
Ask for Catalog 699.

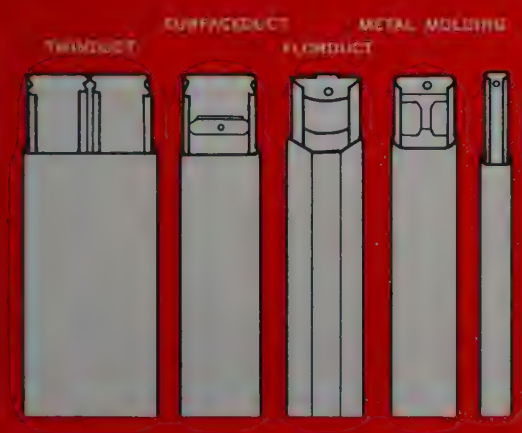
UNDERFLOOR RACEWAYS

Made in ten-foot lengths from 14-gauge cold rolled steel, NE underfloor raceways are zinc galvanized then coated inside and out with acid-resistant enamel. Outlets are spaced every 24-inches.

Designed primarily for new construction, Nepcoduct has a standard 1⅜ x 2⅞ inch cross-section. Flushduct is used primarily for modernizing existing buildings, by trenching the floor. Jumboduct, for industrial applications, has a 4 x 4 inch cross-section. Headerduct in 8′ to 10′ lengths (1⅜″ x 7¾″) is available for energizing cellular steel floors.

Ask for Underfloor Raceways Catalog 539 and Headerduct Catalog 700.





SURFACE RACEWAYS

National Electric's "lay-in" design eliminates fishing. Just mount the base to wall or floor, lay the wires in the base and snap on the cap. All types can be interconnected. Various cross-section sizes accommodate different number and sizes of wires. Trim contours blend with old or new surrounds. Complete line of fittings for a neat fit in minimum time.

Ask for Surface Raceways Catalog 707.

PLUG-IN STRIP

SPECIAL CABLES

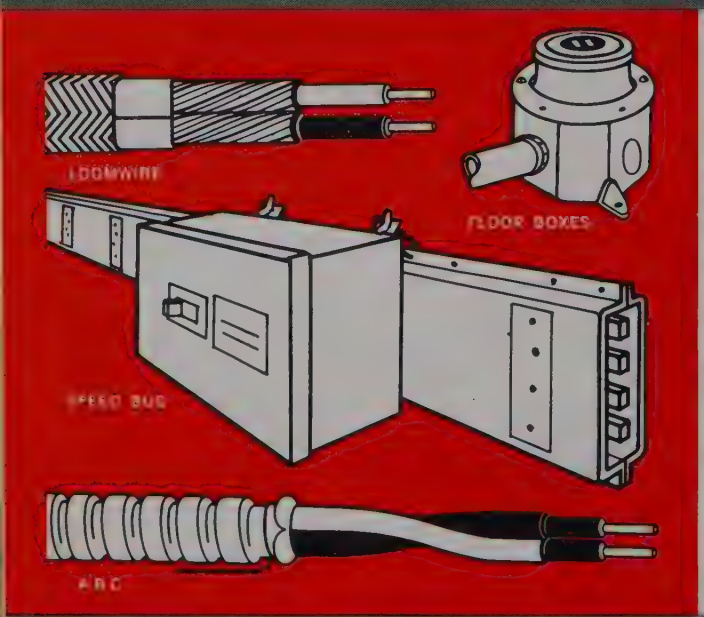
For hundreds of special applications, National Electric makes power cables through 28,000 volts. Some are silicone rubber insulated, butyl rubber insulated, neoprene sheathed, plastic insulated or jacketed, polyethylene insulated or jacketed, shielded or unshielded, grounded or ungrounded, glass sheathed, asbestos-braid sheathed . . . for underground, underwater, duct or aerial use.

Ask for catalogs on each of these five types.

MINING AND WELDING CABLES

Mining Cables. Two, three and four conductor types, 600 to 8,000 volts. Neoprene or rubber sheaths. Round and flat-twin designs, grounded or ungrounded.
Welding Cable. Designed for maximum flexibility, with toughness and strength. Round design for minimum kinking and snarling. Neoprene sheath.

Ask for Catalog 702 and Welding Cable Catalog 716.



FLOOR BOXES, SPEEDBUS, A.B.C., LOOMWIRE

Standard or cast iron floor boxes accommodate the widest range of receptacles, including 2-wire and 3-wire, NEMA grounded, T-slot and twist-lock types through 20 ampere capacity. Large hand hole for easy fishing. Use with ½, ¾ or 1-inch conduit. Full range of leveling adjustment.

National Electric's 100 ampere Speedbus has all the advantages of busway, at a cost equal to or less than conduit and wire. Conductors are 3/16 x 7/16-inch heavily silvered aluminum bars. Each standard 10-foot length has 16 plug-in openings (8 each side).

Non-metallic, sheathed Loomwire for normal requirements, dry locations. Available with type TW conductors, with or without ground wire.

Armored Bushed Cable, 600 volt service conforms to Federal Specification J-C-71C.

Ask for Floor boxes Catalog 705 and Speedbus Catalog 698.

For more information, ask your Electrical Products Distributor, phone one of the numbers shown be
or write National Electric Division, H. K. Porter Company, Inc., Porter Building, Pittsburgh 19, P

PORTER

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H. K. PORTER COMPANY, INC.

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DEPENDABLE

FAST ACTION

SAVES SERVICE

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TIME CONTROLS

...the best for every timing need!

EASILY RE-SET

ALLOY T CONTACTS

SAVES MONEY

QUALITY

SILENT

HEAVY DUTY MOTOR

SNAP OUT MECHANISM

RAPID REFERENCE CHART

SERIES	OPERATION	SWITCH	VOLTAGE	AMPS.	INTERMATIC QUALITY FEATURE
T 100	1 to 12 on-off per day	SPST DPST SPDT	125/250 volts	40	Standard ON-OFF switch.
T 170	1 to 12 on-off per day	SPST DPST SPDT	125/250 volts	40	Same as above, plus automatic skip operation on selected days.
T 180	1 to 12 on-off per day	SPST SPDT	125/250 volts	40	Each on-off period independently adjustable from 5 to 60 minutes.
T 960	1 to 96 on-off per day	SPST SPDT	125/250 volts	20/15	Each on-off period in 15 minute units. Trippers permanently attached to dial.
C 8300	1 to 12 on-off per 12 or 60 min.	SPST	125 volts	15	12 min. cycle timings from 10 sec. to 11 min., 50 sec./60 min. cycle timings from 1 min. to 59 min.
T 500-R	1 to 12 on-off per day	SPST DPST	125/250 volts	55	Heavy duty standard ON-OFF switch. Up to 27,500 watts. Also available with "SKIPPER" feature.
T 1100	1 on-off operation per day	SPST	125 volts	15	Flush wall mounted standard ON-OFF switch to central districts in house or store. (LAMP • LYTER)

WRITE FOR FREE CATALOG OF COMPLETE INTERMATIC LINE

THERE'S AN Intermatic FOR EVERY NEED!

Residential and Commercial Lighting Control • Air Conditioning Heating • Industrial Uses • Farm and Poultry Lighting • Signs Signal Bells, Buzzers, and Lights • Outdoor Installations Flush Mountings

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NEW INTERMATIC MODELS!

◄ **Two Trol SERIES V23000**—Control two circuits independently or simultaneously by setting trippers for desired schedule. Ideal for apartment houses, signs, store interiors and window lights. DP-2 cir., 120/240 volts, 30 amps.

Astronomic Dial SERIES V25000—► Operates night lighting in relation to the rising and setting of the sun. No seasonal resetting is necessary. Recommended for store windows, neon signs, parking lots, garages. DPST & SPDT, 120/240 volts, 40 amps.

INTERNATIONAL REGISTER COMPANY

CHICAGO: 2624 West Washington Blvd. • NEW York: 41-14 24th St., Long Island City

EASIER TO DO... and costs less too!

B-M

INDENTER FITTINGS and TOOLS

Here is the combination that is unbeatable when it comes to easier E.M.T. installation at less cost. New lightweight plier size indenters make setting up thin wall conduit a breeze. B-M fittings are neater too! No unsightly nuts or projecting set screws.

A few more of the plus features of B-M fittings are Concrete tight—Vibration resistant—Extra heavy bright zinc plate, salt spray and acid drip tested for corrosion resistance—Extra heavy positive bonding lock-nuts—Smooth rounded edges or bushed throat type connectors that prevent insulation damage—All steel construction with extra heavy gauge wall thickness.

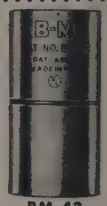
Red Throat
BM-21B
½" Connector

Red Throat
BM-22B
¾" Connector

Red Throat
BM-23B
1" Connector

BM-41
½" Coupling

BM-42
¾" Coupling



BM-43
1" Coupling

BM-51 ½" Offset Connector
BM-52 ¾" Offset Connector

BM-21
½" Connector

BM-22
¾" Connector

BM-23
1" Connector

BM-No. 600
Changeable Jaw Indenter

BM-No. 1000
Handvise for ½", ¾" and 1" E.M.T.

BM-No. 100
Cutter for ½", ¾" and 1" E.M.T.

BM-No. 607
½" Indenter
BM-No. 608
¾" Indenter

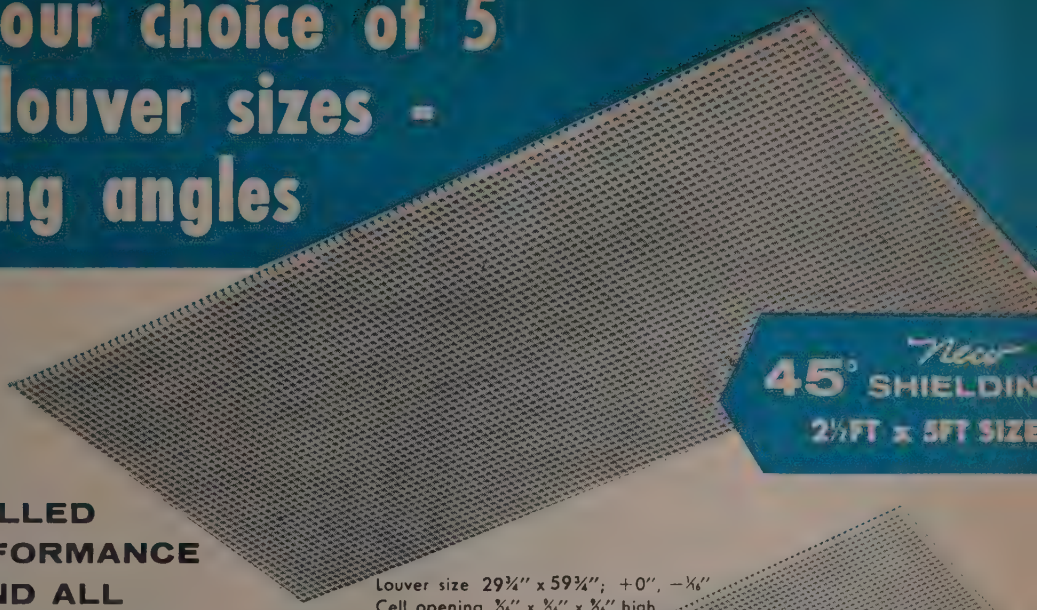
UL

TELESCOPE BM SYSTEM

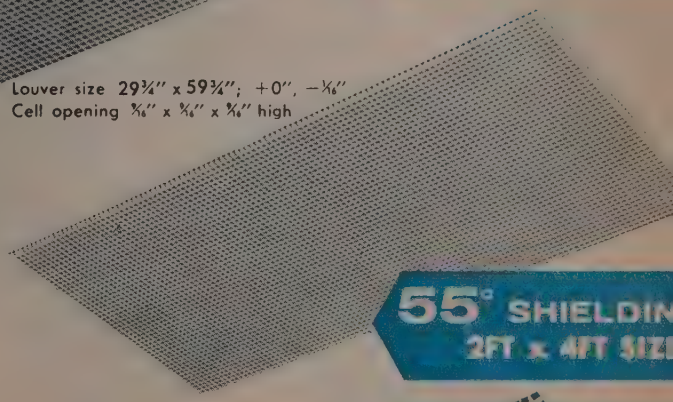
All B-M indenter type fittings far exceed the requirements of U. L. file card E 10863 and Federal Specifications W-F-406.

BRIEGEL METHOD TOOL CO.
GALVA • ILLINOIS

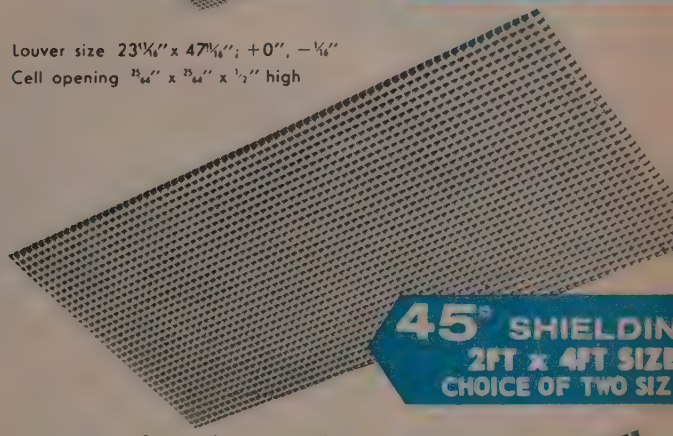
ow! Your choice of 5 ghting louver sizes - shielding angles



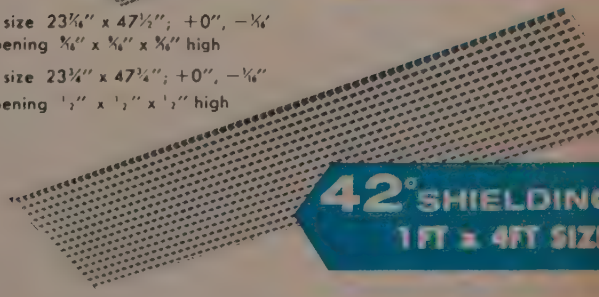
Louver size 29¾" x 59¾"; +0", −1/16"
Cell opening 7/16" x 7/16" x 7/16" high



Louver size 23 11/16" x 47 11/16"; +0", −1/16"
Cell opening 25/64" x 25/64" x ½" high



Louver size 23¾" x 47½"; +0", −1/16"
Cell opening 7/16" x 7/16" x 7/16" high
Louver size 23¾" x 47¾"; +0", −1/16"
Cell opening ½" x ½" x ½" high



Louver size 10¾" x 47¾"; +0", −1/16"
Cell opening ⅜" x ⅜" x 3/16" high

WITH UNEXCELLED LIGHTING PERFORMANCE FOR TODAY AND ALL FUTURE HIGH LIGHTING LEVEL REQUIREMENTS

AMERICAN LOUVER offers 3 shielding media—42°—45° and the all new 55° louver, for higher lighting efficiency and uncluttered appearance—they will meet your most rigid lighting requirements for individual fixtures, modules or complete louvered ceilings.

It pays to specify American

- PERMANENT COLOR STABILITY
- HIGH IMPACT FOR GREATER STRENGTH
- EASY TO HANDLE—LIGHT WEIGHT
- PATENTED INTERLOCKING LOUVERS
- ASSURE PERFECT ALIGNMENT
- LOW COST UPKEEP—EASY TO CLEAN
- AVAILABLE IN COMBINATION OF SIZES
- LOUVERS MAY BE CUT TO SPECIFICATIONS

american plastic louvers

	Units	Formulation HF 77–1040	ASTM
MECHANICAL			
Tensile Strength	Lbs per sq in.	6500–8000	D638–52T
Elongation at Break	Percent	1.8–2.4	D638–52T
Modulus of Elasticity	In tension lbs/sq in.	4–5 x 10⁵	D638–52T
Hardness	Rockwell	M70–80	D785–51
Flexural Strength	Lbs per sq in	9000–13,000	D790–49T
Deflection at Break	Inches	0.15–0.35	D790–49T
Impact Strength			
½" x ½" Notched	Izod, ft lbs per in. of notch	0.25–0.35	D256–47T
½" x ½" Gate End Notched	Izod, ft lbs per in. of notch	0.60–0.70	D256–47T
½" x ½" Dead End Notched	Izod, ft lbs per in. of notch	0.30–0.40	D256–47T
Mechanism	— — —	Average	
THERMAL			
Thermal Expansion	In/in per °C	6–8 x 10⁻⁵	D696–44
Heat Distortion	°F at 264 psi	180–191	D648–45T
Deformation Under Load	% at 4000 psi at 50°C	0.8–1.0	D621–51
	% at 2000 psi at 50°C	— — —	D621–51
OPTICAL			
Light Transmission # 1040 Pigmentation			
0.050" thick	Percent Transmission @ 550 mu	52	
0.100" thick	" "	38	
0.150" thick	" "	29	
PHYSICAL			
Specific Gravity		1.04–1.06	D792–50
Moisture Absorption	Percent	0.03–0.04	D570–42
Burning Rate (0.050" thick)	In./min	1	D635–44
ELECTRICAL			
Dissipation Factor	10⁶ cycles	.0001–.0005	D150–47T
Dielectric Constant	10⁶ cycles	2.65–2.65	D150–47T
Dielectric Strength	Volts/Mil, ⅛" thick	400	D149–44
Volume Resistivity	Ohm/cm	10¹⁴ —	D257–52T

The above data represent average values determined on virgin molding powder under appropriate A.S.T.M. tests conducted in the present range of Lustrex Permatone* colors, formulations

* Lustrex Permatone Reg. U.S. Pat. Off. Monsanto Chemical Company

Available in pastel colors

For pertinent facts on American louvers, write for bulletin 33am and new 3 color catalog—

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5308 NORTH ELSTON AVENUE • CHICAGO 30, ILL.

PLM Type ACSJ-15
Cable Splicing Kit

5 to 23 kv cable splices to make?

There's a PLM Kit to simplify the job!

Splicing armored cable . . . . non-metallic sheathed cable . . . lead-covered cable? There's a PLM Splicing Kit to simplify the job and insure correctly designed splices with a minimum of time and effort! Each PLM Splice Kit contains all materials needed for making one correctly-designed splice (including aluminum or galvanized steel casing), together with clear, step-by-step instructions for making it. Need for ordering or stocking many separate items is eliminated.

PLM Splicing Kits, complete with casings, are also supplied for making 3 and 4-way splices with armored cable. PLM kits and fittings are fully listed and described in PLM 52-page catalog 301. Write on letterhead for your copy.

PLM Products, Inc

TERMINATING AND SPLICING ACCESSORIES

3875 WEST 150th STREET • CLEVELAND 11, OHIO

Hoffman

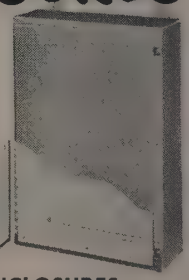
JIC and NEMA 12

OIL-TIGHT
DUST-TIGHT

ELECTRICAL ENCLOSURES

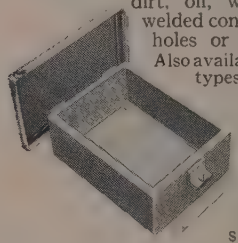
WALL MOUNTED, in 18 stock sizes.

FLOOR MOUNTED, in double door or multiple door units—11 stock sizes.



JIC NEMA 12 PANEL ENCLOSURES

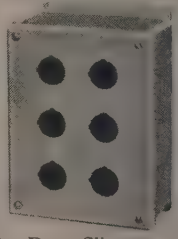
Ideal for housing electrical controls, components and terminal strips. Note removable mounting panel. Neoprene gasket on door protects against dust, dirt, oil, water. Strong welded construction. No holes or open seams. Also available in NEMA types 1, 3, 4 and 5.



JIC WIRING BOX

Heavy gauge steel, welded seams. No knockouts or holes to leak oil, water or dust. Neoprene gasketed cover with screw clamp makes tight oil-proof seal. Available with or without removable panel. 8 stock sizes from 4"x4"x3" to 16"x14"x6".

PUSHBUTTON ENCLOSURES



A complete selection of types and sizes. Fine quality construction and finish. Welded seams. Cover has neoprene gasket. Holes take any standard oil-tight pushbutton. Types range from "Standard" *as shown*, to Extra Deep, Slim and Pendent. For one to 25 pushbuttons.

OIL-TIGHT JIC SECTIONAL WIREWAY

Perfect protection for control wiring. Neoprene gasket on cover and between joints seals out liquids and dust. Easy to assemble. Full length hinged cover simplifies wiring installation or modification after installation. Stock sizes: 2½"x2½", 4"x4" and 6"x6" in lengths up to 10' with Elbows, "T"s, etc.

We also build enclosures to customer specifications

Hoffman ENGINEERING CORPORATION
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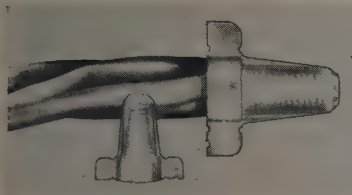
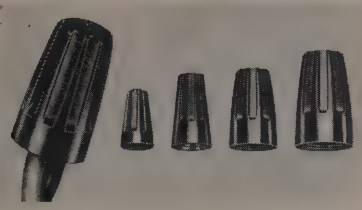
Always In Stock

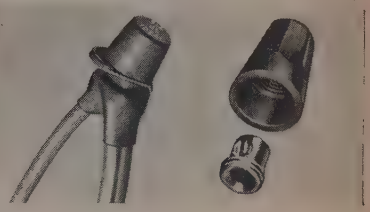
YOU GET IMMEDIATE DELIVERY FROM YOUR LOCAL DISTRIBUTORS OF THESE POPULAR IDEAL PLANT MAINTENANCE PRODUCTS



Built-in wrench. Unique wings make WING-NUT easiest wire connector to screw on heaviest branch circuit wires. Splice is visible inside tough nylon shell. U.L. listed for 600 volts as pressure cable connector, and 105°C. U.L. approved for aluminum and solid and/or stranded copper wires. 2 sizes of WING-NUT available to meet all pigtail splice needs.

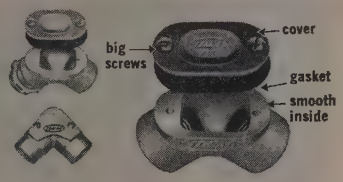


America's favorite! WIRE-NUT has long-proven performance record as lowest-cost method for all common branch circuit and fixture wire connections. Strongest, shake-proof wire joint possible. All 5 sizes U.L. listed as 300v fixture; large sizes 74B & 76B as 600v pressure cable connectors. Use WIRE-NUTS in all types of conduit, cable, non-metallic sheath and open wiring.



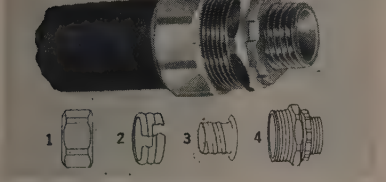
Select Set-Screw or Crimp. Only Ideal CRIMP has WRAP-CAP that insulates all around and even between wires. 600v U.L. approved for cadmium plated steel sleeve and vinyl 1-piece WRAP-CAP . . . now 2 sizes. 3 sizes of Ideal SET-SCREWS. All U.L. listed. Shell and connector easily removed and re-used. Tough shell has long skirt to prevent flash-over.

Cut "fishing" time. Highest grade, oil-tempered flat spring steel FISH TAPES will not curl. Flexible and easy for long, multi-bend conduit runs. Steel reel holds tape, is handled with safe, sure grip and ends danger of bending, kinking or breaking tape. Used with flexible leader, solves 90% of fishing problems. ⅛" and ¼" tapes in 50, 100 and 200 foot coils.



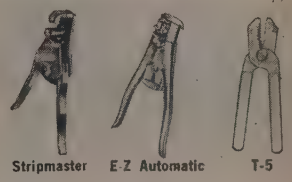
Easiest way around! Ideal PULLING ELBOWS & ADAPTERS make wiring around corners a snap. Precision milled of malleable iron for rugged strength and perfectly smooth pulling. Precise 90° fit. Cadmium plated, chromate treated. Supplied assembled, complete with rigid domed cover, full neoprene gaskets and BIG screws. ½" to 2" sizes, in three styles.

Double protection—Ideal VOLTAGE TESTER has a solenoid, calibrated indicator **and** a neon test lamp . . . each independent of the other. Safest, easiest for rugged daily use. Plastic safety yellow case, no-slip prods, prod storage space, fits pocket. Tests voltage, frequency, AC or DC, continuity, etc. Also model with resistor-fuses in prods to prevent arcing.

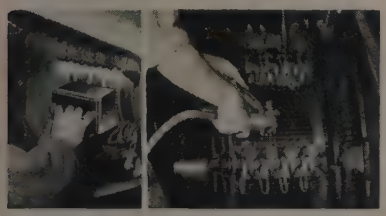


Vap-Oil-Tite—only completely reusable connectors for liquid-tight, flexible metallic conduit. Perfect seal. Positive ground, covers raw conduit end, fits EF and UA. U.L. approved. 90°, 45° and straight for ⅜" to 4" sizes. Easy to apply: Slip ring nut (1), and split ring (2), on conduit. Screw grounding bushing (3) inside conduit. Tighten ring nut over connector (4).

Vacuum cleaners and blowers. Blows dry air at high velocity but low pressure, so safe for delicate equipment. Light, balanced hand models for heavy, medium or light duty, complete with blower nozzle. Available with hand model or tank type cleaning attachments. Ideal CLEANERS do better job faster, at less cost. Universal type motor lubricated for life.



Strip wires fast and easy. "One-squeeze" STRIPMASTER strips both solid and stranded wire in 2 seconds. Heavy-duty E-Z AUTOMATIC cuts thru toughest insulation and strips wires clean without crushing ends. Low cost T-5 STRIPPER cuts, strips and loops wires. Fits flat in pocket. Strips 10 to 18 gauge. Many other special Ideal hand stripper models available.



In-place motor maintenance. Service commutators, motors without dismantling . . . use Ideal commutator resurfacers, brush seaters, flexible abrasives. All sizes and styles to fit any job. Ideal line also includes everything for commutator care: precision grinders, mica undercutters and many specialized small tools. See your distributor.

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THE HELPING HAND ON EVERY WIRING JOB

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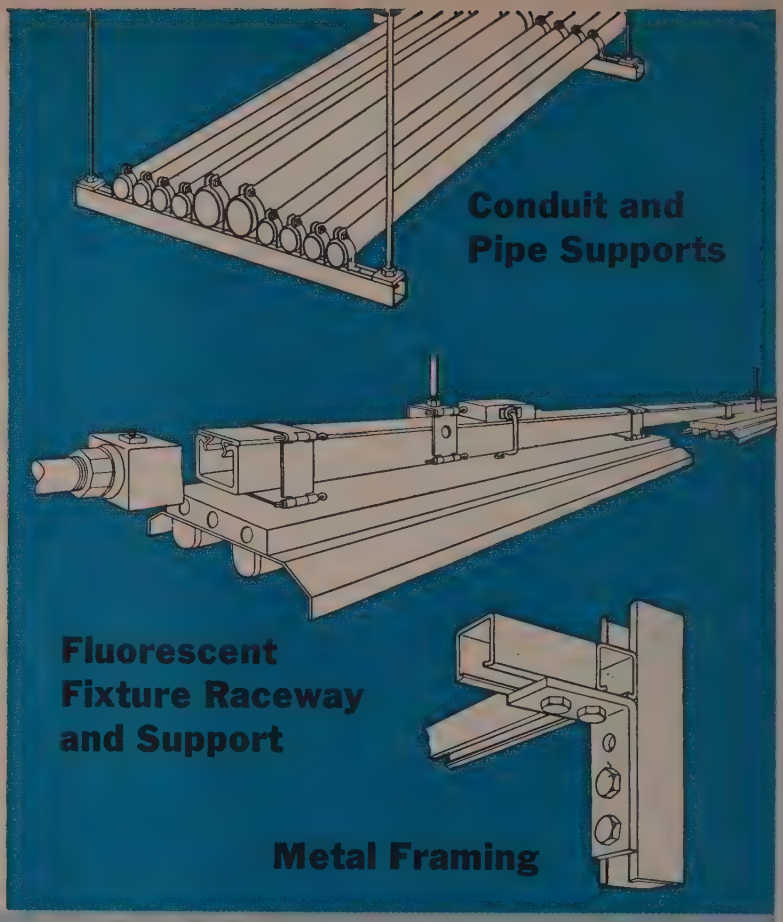
STEEL CITY'S CHANNEL AND SUPPORTS



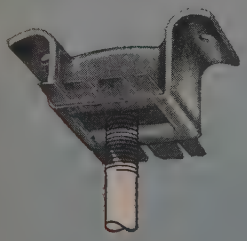
THE KINDORF METHOD

GALV-KROM FINISH

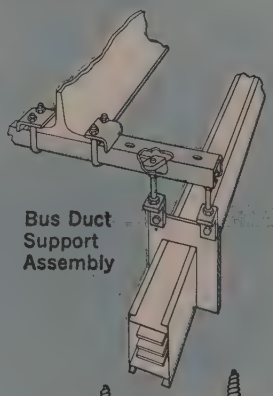
An electrogalvanized finish

PLUS added protection of zinc chromate

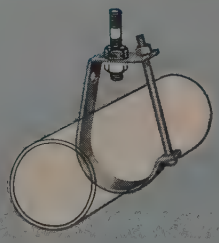
and accessories too . . .



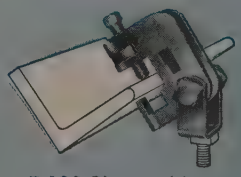
D-255 Concrete Insert



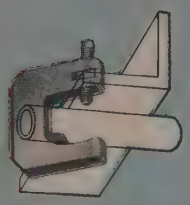
Bus Duct Support Assembly



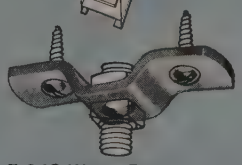
C-149 Series Conduit Hangers



E-232 Clamp with Swing Connector

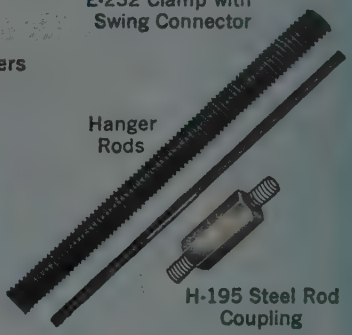


C-247 Conduit Clamp



E-243 Wood Beam Support Flange

H-286 Series U-Bolts



Hanger Rods

H-195 Steel Rod Coupling

SOLD THROUGH WHOLESALE DISTRIBUTION ONLY

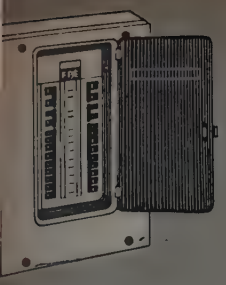
Refer to Sweets Catalog files or write for product information

Write for new Steel City Handbook

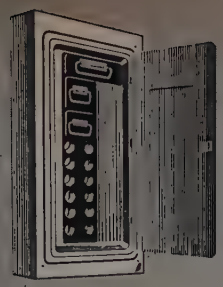
STEEL CITY ELECTRIC COMPANY

A subsidiary of American-Marietta Company

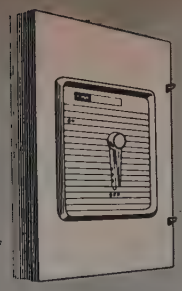
PITTSBURGH 33, PA.



tab-lok® Load Centers

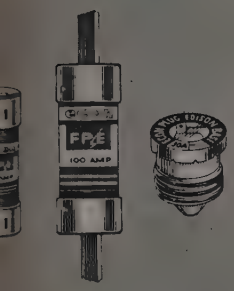


SF Fusible Load Centers

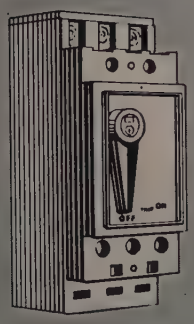


Rotary Handle Safety Switches

Specify FPE for quality electrical control, distribution and power equipment—for residential, commercial, industrial and utility systems. Federal Pacific Electric Co., 50 Paris Street, Newark 1, N. J.



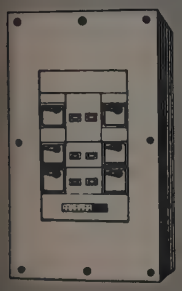
Economy® Fuses



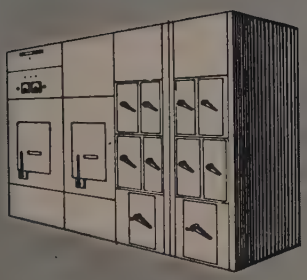
Rotary Handle Circuit Breakers

Motor Controls

Lighting Panels

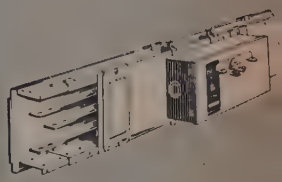


Power Panels

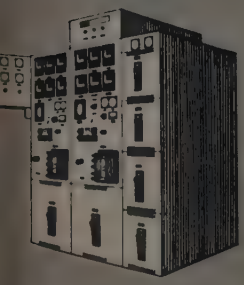


Switchboards

Motor Control Centers

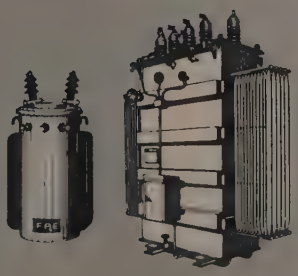


Modular Bus Duct

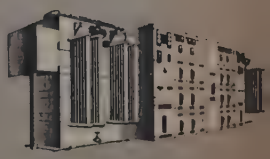


etal-Enclosed LV Switchgear

Metal-Clad HV Switchgear



Distribution & Power Transformers



Unit Substations

Ag Power Switches

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Power Capacitors

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LIGHTING STANDARDS WITH

Luminaire Lowering Mechanism

for convenient GROUND LEVEL MAINTENANCE

Now, P & K lighting standards are available with this new approved mechanism — ideally suited for locations inaccessible to maintenance equipment or where such equipment is not available for any reason. Thus, to the maintenance free strength and beauty of P & K all-aluminum standards, you enjoy the economy and convenience of ground level relamping or service.

The lowering mechanism, model LM-1, is available with P & K single and twin arm standards with truss arms up to 15 feet. It can be used to support incandescent or mercury vapor luminaires, pendant type, and bail or yoke suspended single or twin floodlights.

For helpful technical data, write for 6-page catalog LM-1.

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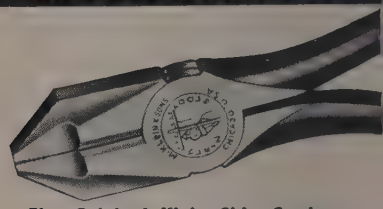
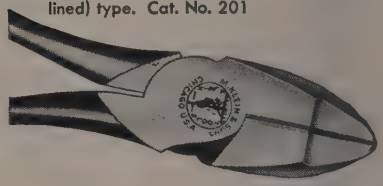
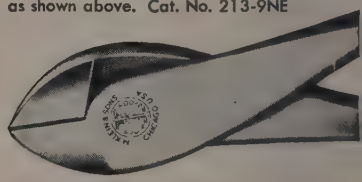


The Original Klein Side Cutting Plier—Also available in NE (Streamlined) type. Cat. No. 201



High Leverage Plier—Extra high leverage permits cutting extremely tough wire. Also available in the standard type as shown above. Cat. No. 213-9NE



High Leverage Oblique Cutting Plier—A recently introduced plier designed to cut toughest wire. Cat. No. 228-8

Electrician Conduit Plier—Reams inside and outside of conduit, tightens lock nuts in outlet boxes. Cat. No. 333-8

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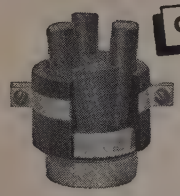
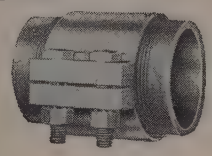
CONDUIT FITTINGS

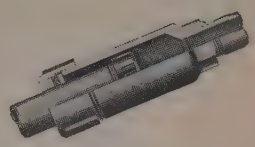
CABLE SUPPORTS
CONDUIT TYPE



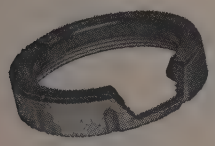
CABLE SUPPORTS
SPLIT TYPE



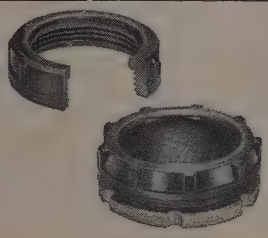
SPLIT
COUPLINGS



EXPANSION
FITTINGS

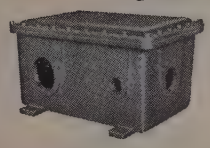


INSULATED
BUSHINGS

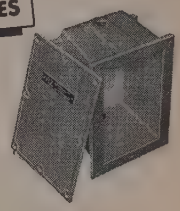


BAKELITE
BUSHINGS

CAST IRON BOXES



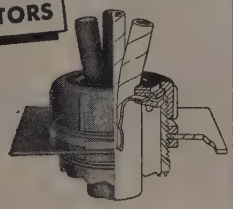
EXPLOSION-PROOF
TYPE



WEATHERTIGHT
SUBMERSIBLE TYPE

CABLE TERMINATORS

TERMINATING
POTHEADS



SEALING
BUSHINGS

INTERLOCKED ARMOR CABLE FITTINGS

TERMINATORS

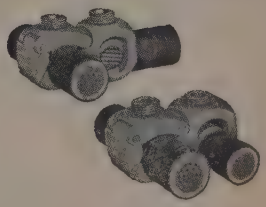
SPLICING
FITTINGS

SOLDERLESS CONNECTORS

COMBINATION
LUGS

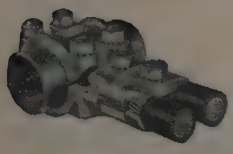
COMBINATION
TWO-WAY
CONNECTORS

SERVICE
TAP



COMBINATION
TEE AND
PARALLEL CONNECTORS

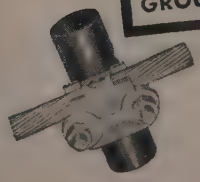
POWER CONNECTORS



T-CONNECTORS, TUBE
TO MULTIPLE CABLE TYPE

BUS BAR
CLAMPS

GROUND CONNECTORS



CABLE TO PIPE OR ROD
90° OR PARALLEL

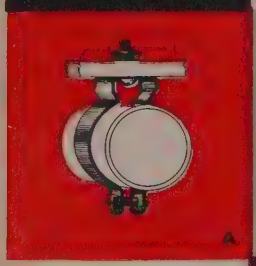
CABLE TO
FLAT BAR

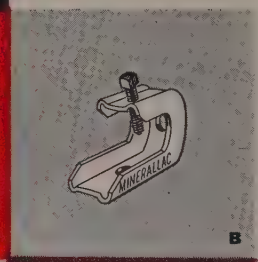
They're O. K. if They're O. Z.

WHY GUESS?

BE SURE WITH "SIZE-MARKED"

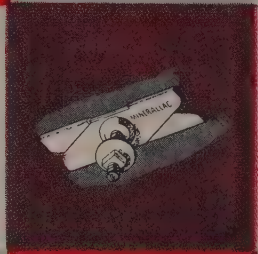
MINERALLAC METAL FITTINGS!

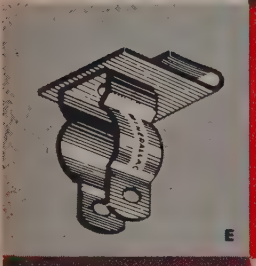


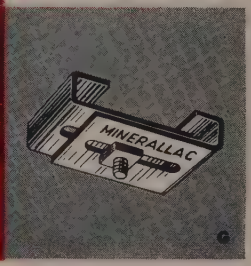


End time-consuming guesswork and costly mismatches in the stockroom and on the job with MINERALLAC Fittings with exclusive "Size-Marked" feature! Each MINERALLAC Hanger, Clip, Strap and Beam Clamp is clearly and individually stamped with its *exact size* for immediate identification and quick, easy handling. Where time is money, "Size-Marked" Metal Fittings help you save!

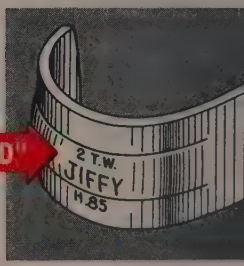
You'll enjoy a triple advantage when you specify MINERALLAC. Exclusive, "Size-Marked" time saving *Economy* . . . plus outstanding Service and fast *Delivery* which have made MINERALLAC famous with leading contractors throughout the world.

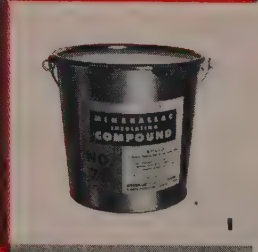


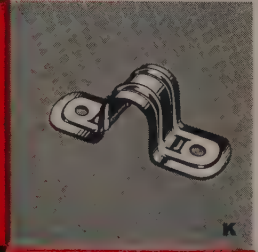




WHEN IT'S "SIZE-MARKED" YOU CAN BE SURE!







SEND FOR LITERATURE AND PRICES...

A. Hangers—Cable and Conduit Hangers. In Zinc-plated Steel and Everdur. All sizes. Insulated bushings available. Top quality. Permit quick wiring.

B. Steel Beam Clamps—for Mounting Hangers on I Beams. Mounts Minerallac hangers No. 0 to No. 6 on I-Beams without necessity of drilling holes. Have ¼-20 tapped holes. Fits beam flanges up to ½" thick. Low cost.

C. Heavy Duty and Medium Jiffy Clips—Made of heavier material. Has exclusive inverted rib, that provides more strength at the bend of clip . . . and, of course, adds the benefits of famous "Snap On" feature!

D. Scissor Clip—Two-piece clip for mounting Fixtures, Boxes or Conduit Hangers to 1-inch T-Bar. Easy to install and locks in place.

E. Min-A-Clip—The most efficient and economical method available for installing Conduit or Pipe on Bulb Tee Irons of "Poured Gypsum Deck Type Roofs". Hanger turns on rivet, eliminating many bends.

F. Stud Clip and Fixture Stud Clip—For mounting 8B or 1900 Outlet Boxes or hanging Fixtures on Bulb Tee Irons. Fixture Clip available for either pipe or rod.

G. Two-Piece Stud Clip—For mounting Fixtures, Boxes or Conduit Hangers to Tee Irons on Beams heavier than 1-inch T-Bar. Fits flanges 1⅝" to 2⅝" width up to ¼" thick.

H. No. 100 "Pull-In" Compound—For Rubber, Synthetic, Plastic or Lead-Covered Wires or Cables. Approved by Underwriters' Laboratories for lubricating wires and cables to facilitate pulling them into conduits. Not injurious to wire or covers. Available in pint, quart, ½-gallon, gallon and 5-gallon cans.

I. Insulating Compounds—A dependable line of insulating compounds for use in Cable Joints, Potheads and Terminal Bells. Eight types for various voltage, temperature and climatic conditions. Also Oil Insoluble Compounds. Available in ½-gallon, 1-gallon, 2-gallon, 5-gallon and 50-gallon drums.

J. Ring Hangers—For supporting cable, conduit or pipe. Stocked in sizes from ½" to 2". Can be used in combination with Minerallac Perforated Strap. Zinc-Plated Steel. Special sizes available on request.

K. Two-Hole Pipe Straps—For cable, conduit and pipe. Available in Zinc-Plated Steel or Everdur for sizes from ½" T. W. to 1" I.P. Available in Zinc-Plated Steel only for sizes from 1¼" T. W. to 6" I. P.

L. "Minny-Twist" Hangers—Supports pipe and conduit. Install with screw or bolt. Hang conduit in hanger. Insert tongue in slot and twist with closing wrench.

MINERALLAC® *Electric* COMPANY

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Choose from the leading line—

THE LARGEST SELECTION OF CAST IRON BOXES

HOT DIPPED GALVANIZED

HOPE

REDUCE OUTDOOR LIGHTING COSTS

Specify the *Original*

HOPE

MALLEABLE IRON METAL PIPE POLE BASE

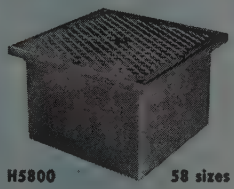
Attractive, rugged lighting poles easily field-fabricated by combining Hope threaded bases with *standard* conduit or pressure pipe. Four base sizes permit your fixture and elevation selection for a limitless variety of installations. Base hubs tapped deep for strong, locking engagement with threaded pipe. Ample chamber for stubbing conduit, splicing, grounding.

H42200 2"
H42250 2½"
H42300 3"
H42400 4"

Bases also available with weatherproof 3 pole receptacle covers, 110v. or 208v., or both.

HUNDREDS OF TYPES AND SIZES

FLUSH MOUNTED NEMA IV WEATHERPROOF

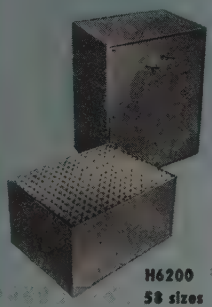


H5800 58 sizes

SIDEWALK BOX WITH CHECKERED NON-SKID COVER

H7000 60 sizes

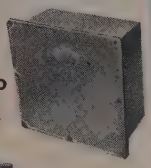
FLANGED RECESSED COVER BOXES, PLAIN OR CHECKERED COVER



H6200 58 sizes

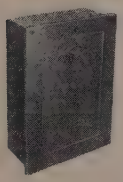
INTERNAL FLANGED WITH PLAIN OR CHECKERED COVER

SURFACE MOUNTED NEMA IV WEATHERPROOF



H8000 92 sizes

FLAT FLANGED COVER WITH WIDE GASKET

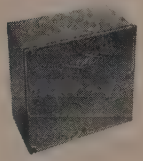


H2200 134 sizes

OVERLAP COVER WITH RETAINED GASKET

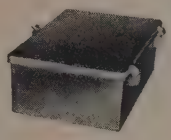
H3200 138 sizes

HINGED COVER, WITH WING NUT CLASPS, RETAINED GASKET



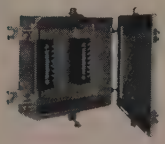
H1200 172 sizes

PLAIN SCREW COVERS



H5500 50 sizes

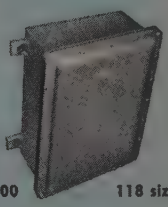
PIN HINGED COVER WITH SINGLE WING CLASP



H3200-T 17 sizes

TERMINAL CABINETS FOR THERMOCOUPLES OR CONTROL

EXPLOSION RESISTING NEMA VII CLASS I GROUP D

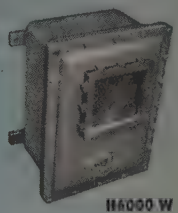


H6000 118 sizes

JUNCTION AND APPARATUS BOXES FOR HAZARDOUS VAPOR LOCATIONS

H6000 S 4 sizes

SAFETY SWITCHES FOR HAZARDOUS LOCATIONS, 30, 60, 100, 200 amp. to 600v.



H6000 W

Twelve window sizes

SQUARE OR RECTANGULAR, FOR METERING, INSTRUMENTATION

Boxes can be supplied to your specifications with Drillings • Tappings • Five Thread Bosses • Mounting Lugs • Special Gaskets • Electrical Apparatus • Many types can be modified to meet special conditions.

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For full information on the entire box line, REQUEST YOUR HOPE CATALOG TODAY

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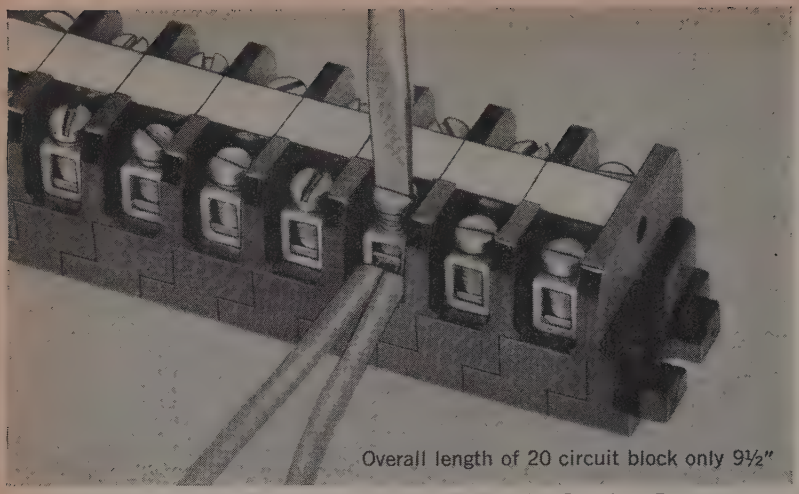

Overall length of 20 circuit block only 9½"

40 Amp. Capacity in 7/16" C. C. Space Same As Most 15 Amp. Barrier Strips

Buchanan has this . . . and more. No terminals, no lugs, fewer wiring problems when you use Buchanan sectional MD pres-SURE-blocks with tubular contacts. And, you can group more common wires—equal to 1 #22 thru 1 #8—under a single contact. Just 2 different snap-fit parts build any length Buchanan MD block . . . with more "wanted" features than conventional blocks. Strap screw contacts also available. Write now for Bulletin EC-9

Tubular contacts listed by UL. Blocks listed for 600 volts by CSA. U. S. Pat. No. 2,922,139

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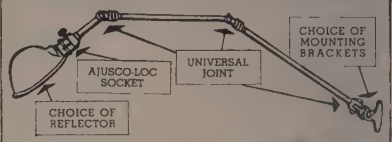
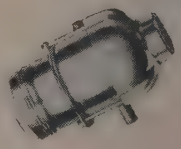
LOCAL LIGHTING
FOR MACHINE AND BENCH
Easy to Use—Hard to Damage



Exclusive "AJUSCO-LOC" Socket



Ajusco-Loc Socket—Guaranteed not to break, kink, twist, or pull apart.

Put the light where you want it and it stays there—no sagging or slipping. Eliminate costly repairs and lost time with these fixtures that stay on the job and out of the repair shop.

Write today for Catalog 66
There's a "right" fixture for every job.

Adjustable
AJUSCO MILWAUKEE WIS. **FIXTURE CO.**
Established 1911
104-108 E. Mason St., Milwaukee 2, Wis.

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first choice for dependable fire protection equipment!

- Complete systems for schools, hospitals, commercial buildings, industrial plants—every type of property. Coded or non-coded.
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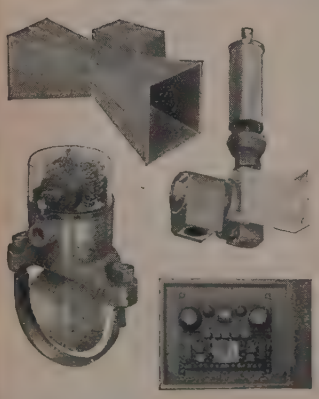
Write for your copy of Autocall's complete Fire Alarm Catalog now!



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For everything in quality electric heating equipment

- *Glass radiant baseboards and wall panels*
- *Unit heaters*
- *Infra-red spot heaters*
- *Convection baseboard systems*
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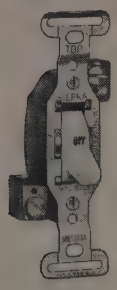
BERKO ELECTRIC MFG. CORP.
182-20 Liberty Ave.,Jamaica 12,N.Y.

For that certain kind of contractor who demands the best...

Sierra®

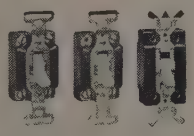
WIRING DEVICES

SWITCHES



SILENT MERCURY

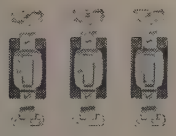
No moving springs or blades to fail. Each switch load-tested.



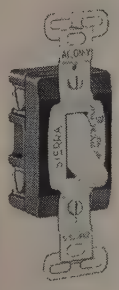
5001 5002 5003 5004

QuieT SWITCH

Combines effortless toggle action with positive current control.



5011 5012 5013



5014

SAVE THIS HANDY SELECTOR GUIDE

for Specification Grade devices

DESCRIPTION	SILENT MERCURY SWITCHES IVORY	SILENT MERCURY SWITCHES BROWN	QuieT SWITCHES* 15 AMP IVORY	QuieT SWITCHES* 15 AMP BROWN	QuieT SWITCHES* 20 AMP IVORY	QuieT SWITCHES* 20 AMP BROWN
Single Pole	5001	5001X	5011	5011X	5051	5051X
Double Pole	5002	5002X	5012	5012X	5052	5052X
Three-Way	5003	5003X	5013	5013X	5053	5053X
Four-Way	5004	5004X	5014	5014X	5054	5054X
Sierra-Lite with glowing toggle						
Single Pole	5005	—	—	—	—	—
Three-Way	5006	—	—	—	—	—

RATINGS

125V "T"	250V	120V, AC
10A	5A	15A

RATINGS

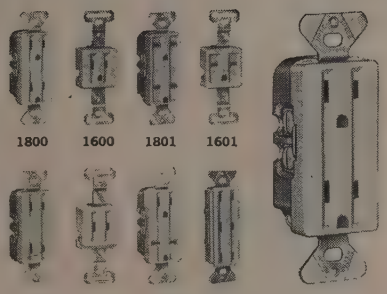
120—277V, AC

*Key operated types also available

RECEPTACLES

SIERRAPLEX

First major design improvement in years! These distinctively styled receptacles are complemented by a full line of matching wall plates. Specification Grade. Meet all existing codes and standards.



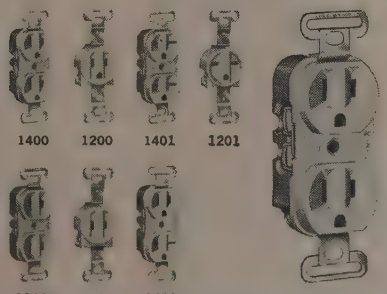
1800 1600 1801 1601

1700 1500 1850 1900

DESCRIPTION	PARALLEL SLOTS 15A-125V IVORY	PARALLEL SLOTS 15A-125V BROWN	TANDEM SLOTS 15A-250V IVORY	TANDEM SLOTS 15A-250V BROWN
BACK AND SIDE WIRED				
Single Grounding-Type 3-wire	1600	1600X	1601	1601X
Duplex Grounding-Type 3-wire	1800	1800X	1801	1801X
Comb. Duplex Grdg-Type 3-wire 15A 125V-250V			1850	1850X
Single Convenience 2-wire	1500	1500X	—	—
Duplex Convenience 2-wire	1700	1700X	—	—
SIDE WIRED				
Single Grounding-Type 3-wire	1602	1602X	1603	1603X
Duplex Grounding-Type 3-wire	1802	1802X	1803	1803X
Comb. Duplex Grdg-Type 3-wire 15A 125V-250V			1852	1852X
Single Convenience 2-wire	1502	1502X	—	—
Duplex Convenience 2-wire	1702	1702X	—	—
Triplex—Single Circuit	1900	1900X	—	—
Triplex—2 Feeds—1 Return	1901	1901X	—	—
Triplex—2 Feeds—2 Returns	1902	1902X	—	—

SIERRA

Conventionally styled, this popular line offers same high quality and craftsmanship as Sierraplex. Features include 2 grounding screws on 3-wire types, handy wire strip gage, and break-off strip for 2 circuits.



1400 1200 1401 1201

1300 1100 1450

BACK AND SIDE WIRED				
Single Grounding-Type 3-wire	1200	1200X	1201	1201X
Duplex Grounding-Type 3-wire	1400	1400X	1401	1401X
Comb. Duplex Grdg-Type 3-wire 15A 125V-250V			1450	1450X
Single Convenience 2-wire	1100	1100X	—	—
Duplex Convenience 2-wire	1300	1300X	—	—
SIDE WIRED				
Single Grounding-Type 3-wire	1202	1202X	1203	1203X
Duplex Grounding-Type 3-wire	1402	1402X	1403	1403X
Comb. Duplex Grdg-Type 3-wire 15A 125V-250V			1452	1452X
Single Convenience 2-wire	1102	1102X	—	—
Duplex Convenience 2-wire	1302	1302X	—	—

WALL PLATES

Choose from world's most complete line! Over 5000 wall plates in Plastic, Brass and Stainless Steel; and in a variety of styles, colors, finishes, combinations and gangs.

STAINLESS "S" LINE BRASS "B" LINE PLASTIC "P" LINE PLASTIC "D" LINE

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SIERRA ELECTRIC CORPORATION

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Leadership through craftsmanship

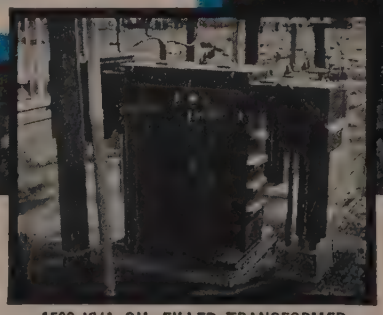
MARCUS TRANSFORMERS SCORE *Excellent* IN ALL TESTS...

From brawny, liquid-filled transformers outside of the Math and Physics Building, Field House, and Fine Arts Building, to whisper-quiet dry type units in the classrooms, laboratories, and dramatics hall, the University of Wichita uses Marcus transformers for dependable, trouble-free performance.

All Marcus transformers, both dry and liquid-filled score "excellent" in factory tests. Loss tests, hi-pot tests, impulse tests, and sound-level tests are passed with flying colors. For full power and guaranteed satisfaction, specify Marcus for *your* next transformer installation.

MARCUS MTC *"Mark of Quality"*

Representatives in Principal Cities



1500 KVA OIL FILLED TRANSFORMER

MARCUS TRANSFORMER CO., Inc.

RAHWAY, NEW JERSEY

A COMPLETE LINE OF DRY TYPE AND LIQUID-FILLED TRANSFORMERS THRU 5000 KVA

Save Time, Money Speed Installations with . . .

P-W

CABLE SUPPORTING SYSTEMS

P-W's TYPE "E" (PUNCHED BOTTOM) TRAYS—FOR POWER AND CONTROL CABLES AND INSTRUMENT TUBING—ALTHO LESS EXPENSIVE, ARE STRONGER, VERSATILE AND SUPERIOR. CONTROL CABLE CAN BE DROPPED OUT ANYWHERE.

Engineers, Contractors and Installers look for QUALITY, LONG LIFE, AND LABOR SAVINGS in their supports. That's why more and more users are turning to P-W. Among our outstanding improvements are: CONNECTIONS that are quick and easy to install—PRE-CUT SYSTEMS saving installation time—EXTENSION CONNECTORS eliminating field cutting to complete runs — ADJUSTABLE HORIZONTAL and RISER CONNECTORS to go over, under or around pipes, trusses, columns, etc. — BUILT-IN ADJUSTABLE DROP-OUT SECTIONS eliminate cutting out bottom of tray — STRAIGHT SECTIONS available in lengths up to 16' (33⅓% less connectors and less installation time over 12' lengths).

P-W SUPPORTS are available in hot dip galvanized steel or aluminum, in LADDER, EXPANDED METAL and SOLID TRAYS in addition to Type "E". All systems are interchangeable. Write for Catalog 858-A.

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P-W **INDUSTRIES**
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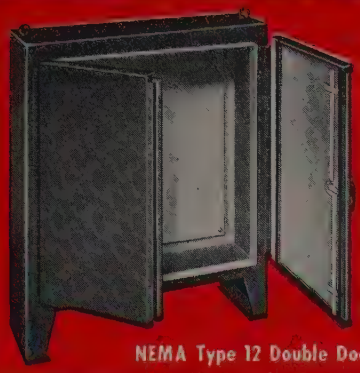
BOSS . . . COMPLETE LINE OF ELECTRICAL ENCLOSURES

NEMA Type 12 Single Door



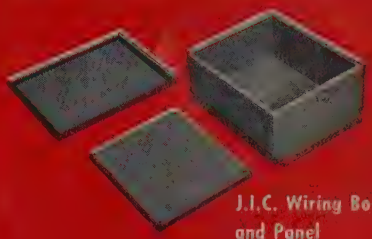
NEMA Type 12 Double Door

NEMA Type 1

Oil Tight Console

Oil Tight Pushbutton

Heavy Duty Unit Enclosures



J.I.C. Wiring Box and Panel

BOSS

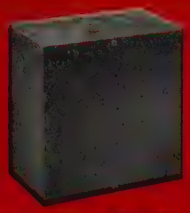
From NEMA Type 12 and J.I.C. Enclosures for critical atmospheric conditions, through all types of Wireway and Fittings . . . stock or "specials" . . . BOSS offers you *excellent quality* and *prompt delivery.*

The complete BOSS line is job-engineered for quick, easy installation. Enclosures are code gauge steel with smooth corners and firm, but easy knockouts. All are UL approved. Durable gray baked enamel finish.

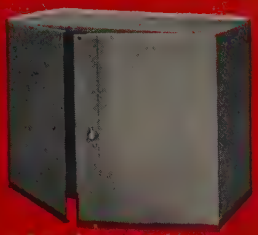
Immediate delivery on stock items from central location. Sell BOSS for increased profits. Write for Catalog on the complete line of BOSS Electrical Enclosures.

Sold thru leading distributors everywhere.

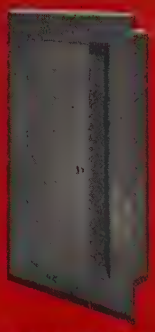
Type "A" Box



Screw Cover Pull Box



Transformer Cabinet



Telephone Cabinet

J.I.C. Flanged Hinge Cover

Complete Line of Fittings

Flangeless Hinged Cover Lay-In

Flanged Hinge Cover

Flangeless Screw Cover

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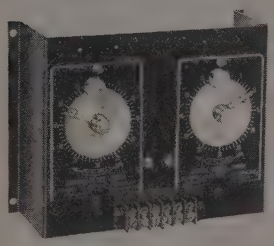
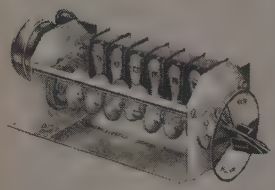
Interval Timers

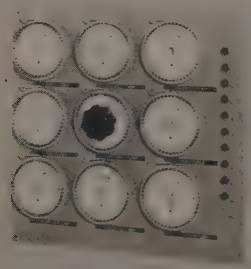
Time Delay Timers



Automatic Reset Timers



Multi-Circuit Cycle Timers



Master Programmers

FAST DELIVERY... on a Wide Range of Special and Standard Timing Controls

Now, choose the right timer for any control requirement from Zenith's versatile line. Save time and avoid delay. Get prompt engineering and delivery on specials . . . immediate delivery on standard controls.

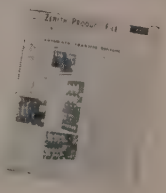
DEPENDABLE—Take advantage of Zenith's experience in engineering and manufacturing quality controls and timing devices for over 35 years.

- Program Clocks
- Time Switches
- Interval Timers
- Time Delay Timers
- Automatic Reset Timers
- Multi-Circuit Cycle Timers
- Percentage Timers
- Impulse Timers

Our Bulletin A-17 also includes

- Automatic transfer switches engineered to assure continuity of power
- Magnetic contactors ruggedly designed for reliable power switching

Write for your copy of Bulletin A-17 today. See classified phone directory under Electrical Equipment for local representative.



ZENITH ELECTRIC CO.

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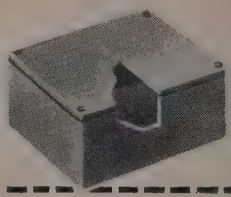
Telephone: MIchigan 2-3322 • Cable Zenelec

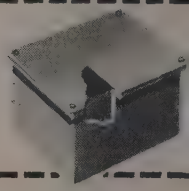
CAST BOXES BY SPRING CITY

17 styles and 1157 sizes available in cast iron, aluminum, brass and bronze alloys. Spring City offers the greatest number of box styles, and the greatest number of box sizes than any other company in the electrical field. 1960 catalog available. Representative styles illustrated below.



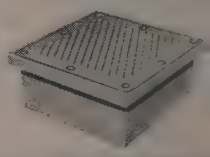
DUST-TIGHT AND WEATHER-PROOF
TYPE S
Surface mounted, 160 standard sizes plus others

WATERTIGHT AND SUBMERSIBLE
TYPE FF
Surface mounted, 95 standard sizes plus others

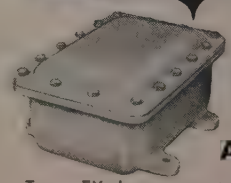


WATERTIGHT AND WEATHERPROOF
TYPE ER
Flush mounted, 53 standard sizes plus others

DUST-TIGHT AND WEATHERPROOF
TYPE SW
— Checkered cover sidewalk boxes, flush mounted, 55 standard sizes plus others



EXPLOSION-PROOF HOUSINGS



- **CAST IRON**
- **CAST ALUMINUM**

Type EX boxes meet N.E.C. requirements for Class 1, Groups C & D hazardous locations. Standard construction includes extra-thick walls, highly machined flanges, great number and close spacing of cap screws, and minimum of 5 full thread conduit entrances. 112 standard sizes plus others. Made to Underwriters and Military Specifications.

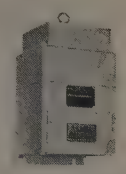
SPRING CITY ELECTRICAL MFG. CO.

SPRING CITY 70, PENNA.
Phone — WIlliams 8-4000

QUIET QUALITY

The Symbol of Specialization in Dry-Type Transformers

Sorgel's complete line assures you of QUIET QUALITY for every purpose

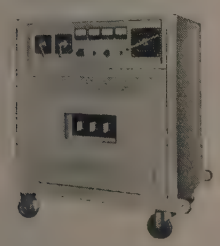


Typical standard construction up to 7½ Kva.

10 — 75 Kva standard transformer, interchangeable wall or floor mounting.

300 Kva three phase transformer, standard enclosure.

Popular types and sizes up to 75 Kva, single and 3-phase, are in factory stock, and shipped same day order is received.



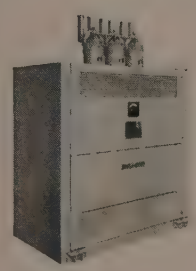
200 Kva portable testing transformer with tap switches and meters.

Up to 10,000 Kva. Up to 15,000 volts

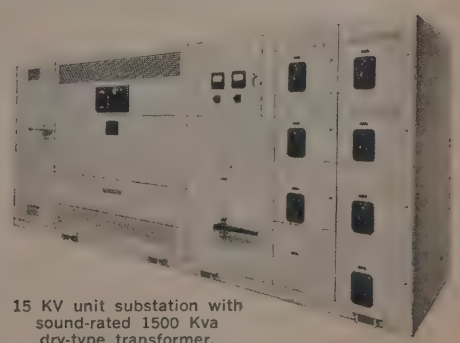
- **Lighting**
- **Power**
- **Rectifiers**
- **Phase changing**
- **Control circuits**
- **Industrial processes**
- **Motor starting**
- **Electric furnaces**
- **Pipe thawing**
- **Brazing**
- **Soldering**

Also special transformers and D.C. saturable reactors

Sorgel Unit Substations, incorporating Sorgel load center transformers, are available with any type or make of Switchgear.



500 Kva standard enclosure, temperature equipment, and oil fuse cutouts mounted on top.



15 KV unit substation with sound-rated 1500 Kva dry-type transformer.

SORGEL SOUND-RATED DRY-TYPE TRANSFORMERS

Since 1916 specializing in creative engineering and manufacturing craftsmanship

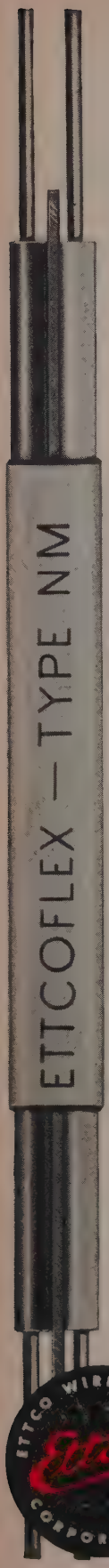
Representatives in principal cities. Consult your telephone directory.

Write for any of these Sorgel publications containing useful product data:

Bulletin 611 — General purpose and special transformers.
Bulletin 960 — Substations and load center transformers.
Bulletin 615 — General description and data regarding D.C. saturable reactors.

SORGEL ELECTRIC CO., 838b W. National Avenue, Milwaukee 4, Wis.

A brand new jacket for Ettco Flex



The all-new Ettco Flex* non-metallic sheathed cable (Type NM) is now P.J. (plastic jacketed).

The new Ettco-Flex P.J. is the first completely new product of its kind in the cable industry for over a quarter of a century. This is a result of ETTCO's constant research and development.

New Ettco-Flex is better by far because it features . . .

- Much smaller diameter than any competitive product.
- Easier stripping.
- No messy paper wraps.
- No sticky saturants.
- Extremely smooth and easy pulling through joists and beams (no snagging or ripping of plastic jacket).
- All sizes with and without ground wire.
- Packaging in new convenient white carton.

See and "Feel" the new Ettco-Flex P.J. at your local distributor.

*PATENT PENDING

ETTCO WIRE & CABLE CORPORATION

OFFICES: 46-50 METROPOLITAN AVENUE • BROOKLYN 37, NEW YORK
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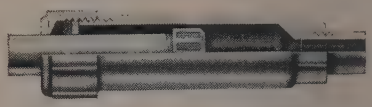
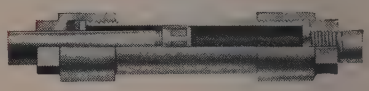
EXPANSION FITTINGS . . by SPRING CITY

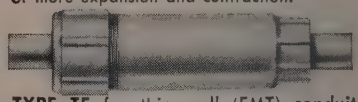
Conduit expansion fittings by Spring City relieve the strain of expansion and contraction in long runs of conduit. Applications: Strains caused by temperature changes, expansion joints in structures, and expansion joints in concrete. 1960 catalog available.



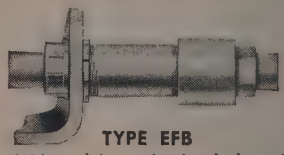
TYPE AF for rigid conduit. Allows 4" expansion and contraction.



TYPE EF for rigid conduit. Allows 8", 12" or more expansion and contraction.



TYPE TF for thin wall (EMT) conduit. Allows 4" expansion and contraction.

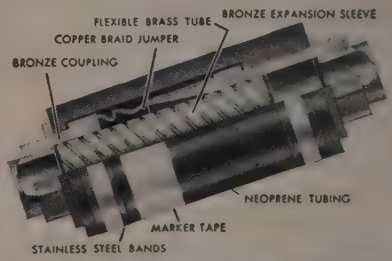


TYPE EFB for rigid conduit terminating in box. Allows minimum of 4" expansion and contraction.

DEFLECTION & EXPANSION FITTINGS

¾" movement in all directions.

30° angular deflection from the normal in any direction. Vibration damper between sections of conduit.



SPRING CITY ELECTRICAL MFG. CO.

SPRING CITY 70, PENNA.
Phone — WIlliams 8-4000

Raco has the most versatile and complete line of roughing-in material you'll find anywhere. Shown here are some representative products of our extensive line. One thing is sure—whatever size, whatever type of box or fitting you require, Raco has it.

And, of course, when it comes to quality, anyone who has used Raco roughing-in materials will tell you, "there are none finer".

Write for more information on Raco fittings and boxes. No obligation, of course.

RACO

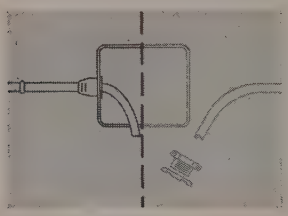
ALL-STEEL EQUIPMENT INC., Aurora, Illinois

BUCHANAN pres-SURE Romex Connectors . . EASIEST, FASTEST TO USE

Just One Piece To Handle. Insert the pres-SURE Romex connector in the knockout, hold firmly against inside of box, give initial crimp with electricians' pliers, then complete crimp with 2 hand-squeeze. No screws, lock nuts or clamps.

One Man Completes Job First Time Around. Only pres-SURE Romex connectors can be inserted in boxes after wires have been run through knockouts. One journeyman can pull wires, install connectors, cut wires to proper lengths, staple wires close to boxes. No wasted wire, no time lost.

More Wiring Room Too—this connector extends less than 3/64" into the box. Insulation abrasion is minimized. Permanently tight, vibration-proof connections are assured. No parts to work loose; can't rust. Write for bulletin EC-9

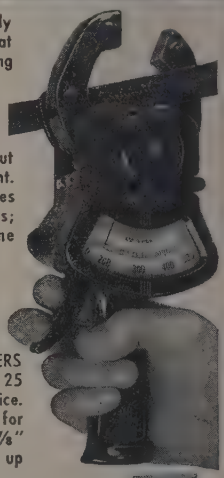


Listed for 14/2, 14/3, 12/2, 12/3, and 10/2 non-metallic sheathed cable. Catalog No. 1050—An exclusive Buchanan product (U. S. Patent 2527227). 3/8" trade size fits standard 1/2 knockouts.

BUCHANAN a subsidiary of ESNA

BUCHANAN ELECTRICAL PRODUCTS CORPORATION
HILLSIDE, NEW JERSEY
In Canada: ESNA CANADA LIMITED, Toronto 16

MEASURE AC and DC WITH ONE AMMETER



TONG TEST is the only instrument of its type that measures both alternating and direct current. Press trigger and snap tongs around the electrical conductor for an instant reading, without shutting down equipment. Interchangeable ranges up to 1000 amperes; impossible to read the wrong scale.

Rugged and dependable, safe and accurate. No coils or wires to burn out. Thousands of TONG TEST AMMETERS in use after more than 25 years of active service. Eight types available for conductors up to 3 7/8" diameter, or bus bars up to 4 1/2" x 1/2".

COLUMBIA

Write for illustrated 8-page Catalog CM-400

COLUMBIA ELECTRIC MFG. CO.
4541 Hamilton Avenue • Cleveland 14, Ohio

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FEDERAL Signals... do it BETTER!

Horns, bells, sirens and lights can say it more quickly, more loudly and over a greater area, than human lung power.

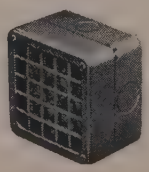
This is the push-button age. Warnings, alarms or summonses can be sounded at the touch of a button.

FEDERAL SIGNALS perform better, install easier and require less maintenance.

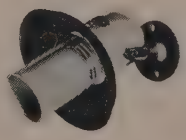
Ask for catalog #100 on FEDERAL SIGNALS and Systems. Bulletin #100 on "How to select Signals" will show you many ways to save time, money and even lives.

#271 Beacon Ray

Heavy Duty Bell



#351 Horn



Model "J" Siren

FEDERAL SIGNAL SIGN and Corporation
13626 S. Western Ave., Blue Island, Ill.

Hoffman ELECTRICAL ENCLOSURES

A Complete line to fit any need you may have.

NEMA and JIC ENCLOSURES
Boxes and panel enclosures to meet JIC or NEMA types 1, 3, 4, 5 and 12.

★

PUSHBUTTON BOXES
38 Standard sizes to house oil-tight push-buttons.

★

WIREWAY and TROUGHS
Both flanged and lay-in types. Made to JIC standards.

★

CONSOLE CABINETS
Heavy gauge, gasketed door consoles in standard models.

★

WEATHERPROOF POWER OUTLETS
For outdoor construction sites, trailer parks, farms and ranches.

★

WEATHERPROOF TERMINAL BOXES
For underground wiring. Made of steel or cast aluminum.

★

REMOTE CONTROLS
"Switch-O-Lite" weatherproof unit for yard lights, floodlighting, etc.

★

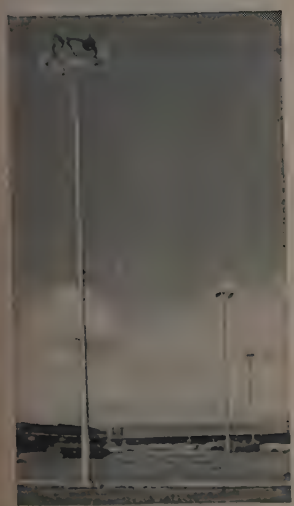
SPECIAL CABINETS
Electrical enclosures custom-built to your specifications. Tell us what you need.

Nationwide stocks: Write us.

Hoffman ENGINEERING CORPORATION
DEPT. EPG-133 1050 Tyler Street Anoka, Minn.

plan your lighting with **MODERN MONOTUBE POLES** steel or aluminum

Airports



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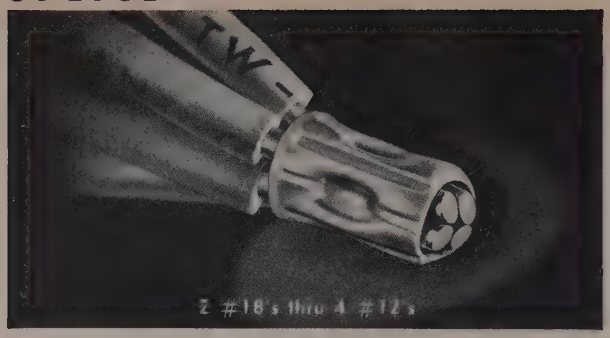
UNION METAL

THE UNION METAL MANUFACTURING COMPANY

Canton 5, Ohio Brampton, Ontario

Monotube Area Lighting Poles

SPLICE



Without WIRE TWISTING

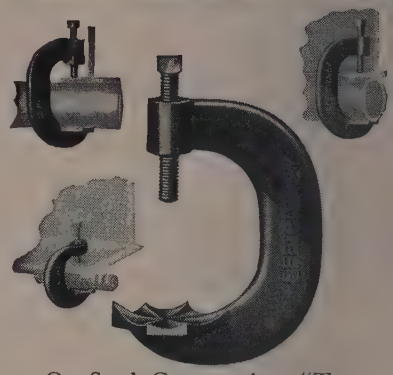
Buchanan's 2008S Steel Splice Caps splice 2 #18's thru 4 #12's better than ever. They won't pull, twist or shake off . . . even on untwisted wires. Crimped with Buchanan's C24 pres-SURE-tool, the 2008S clamps conductors in a vise-like crimp. Its exclusive fluted design strengthens the cap, helps to position it in the tool. When the 2008S Splice Cap is crimped, the flutes confine the conductors into a tight area . . . intimate wire-to-wire contact. There are no voids. This eliminates looseness. You insulate completed 2008S splices with Buchanan's 2007 Snap-On Nylon Insulators. They go on with a snap; provide quickest insulation . . . even on fine wires and in the coldest weather. Write for Bulletin EC-9

Splice caps listed as "pressure-type wire connectors" and "fixture-type splicing connectors" for 2 #18 thru 4 #12's. Insulators UL and CSA listed for 600 v. on building wire and 1000 v. in fixtures, in applications up to 105°C. (221°F.). Also U.L. listed for 1000 v. in electric signs.

BUCHANAN — a subsidiary of ESNA

BUCHANAN ELECTRICAL PRODUCTS CORPORATION
HILLSIDE, NEW JERSEY
In Canada: ESNA CANADA LIMITED, Toronto 16

EFFICIENCY
CONDUIT HANGERS · for GAS · CABLE and AIR LINES

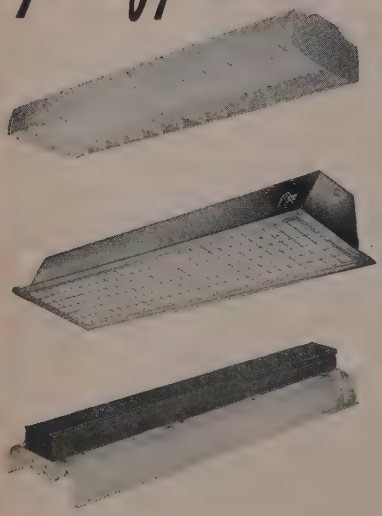


On Steel Construction, "Type F" hangers are best for carrying ½ to 2½ pipe and armored cable at any angle to beams.

Write for new catalog

EFFICIENCY
ELECTRIC & MFG. CO.
EAST PALESTINE, OHIO

For - the finest in lighting
Specify...GOOD Luminaires



. . . the highest in LIGHTING EFFICIENCY

GOOD complete line quality luminaires, are available in a wide variety of widths—length and tandems for fluorescent, slimline, high output or power groove lamps. They meet or surpass your most exacting requirements for any lighting installation—On your next lighting job see GOOD.

GOOD COMPLETE LINE LIGHTING

SCHOOL UNITS • COMMERCIALS
LAY-IN and FLANGE TROFFERS
GEOMENTRICS • CORRIDOR UNITS
INDUSTRIALS—UP-LITE OR CLOSED TOP
4 FT. or 8 FT. LENGTHS—ALL VOLTAGES

We have a lighting fixture . . . to your specifications—or we'll make it!

WRITE FOR 80 PAGE COMPLETE LINE CATALOG WITH FULL DETAILS TODAY

GOOD MANUFACTURING CO.
1015 NORTH HALSTED STREET
CHICAGO 22, . . . ILLINOIS

Latrobe PRODUCTS
★FLOOR BOXES ★ WIRING SPECIALTIES★

No. 190
"TRU-LEVEL"
Adjustable
STEEL FLOOR BOX

The "Tru-Level" is an adjustable steel box with a 3¼" diameter brass cover plate. There are two ½" and two ¾" KO's in sides and two ¾" and three ½" KO's in bottom. Four 1" side KO's available. Come in two standard heights 3⅛" and 2⅝" for power and telephone.

NON ADJUSTABLE Cast Iron
FLOOR BOX

Non-adjustable cast iron floor boxes—3½" diameter brass cover plate, complete with either 2" abandon plug for power or ½", ¾" or 1" for telephone service.

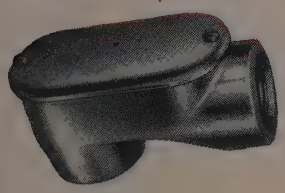
FULLMAN MANUFACTURING CO.
LATROBE . . . PENNSYLVANIA

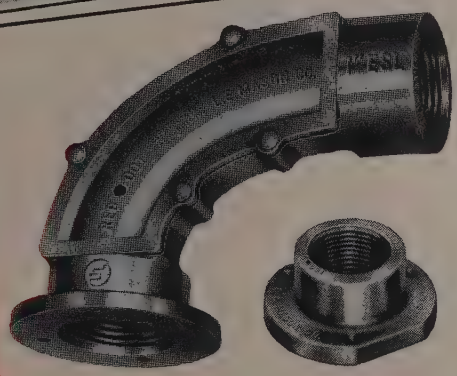
FROM EVERY ANGLE

RED ● DOT FITTINGS offer

VALUE
QUALITY
PROFIT

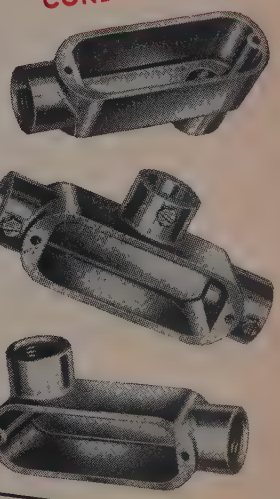
ENTRANCE ELLS



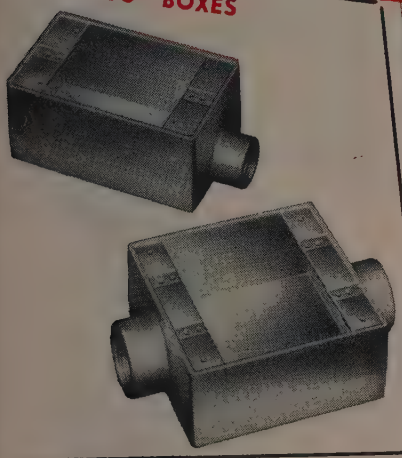


"ELECTRO - SERTS"

CONDUIT BODIES



"FS" BOXES



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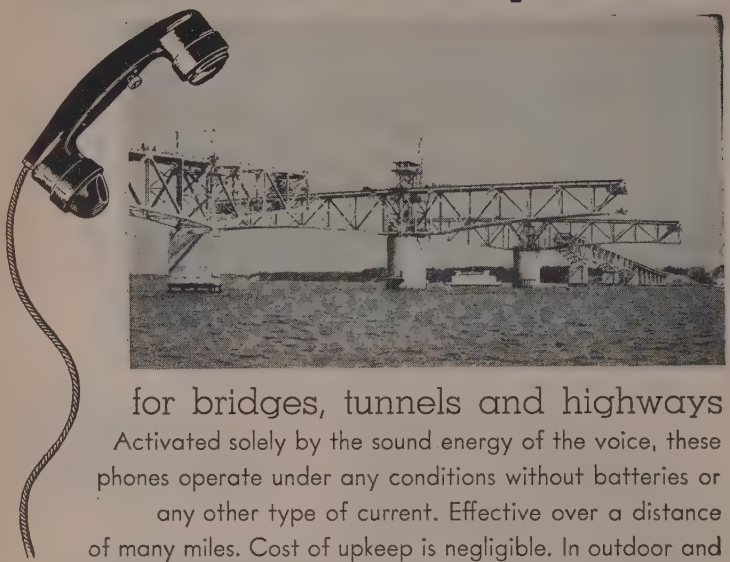

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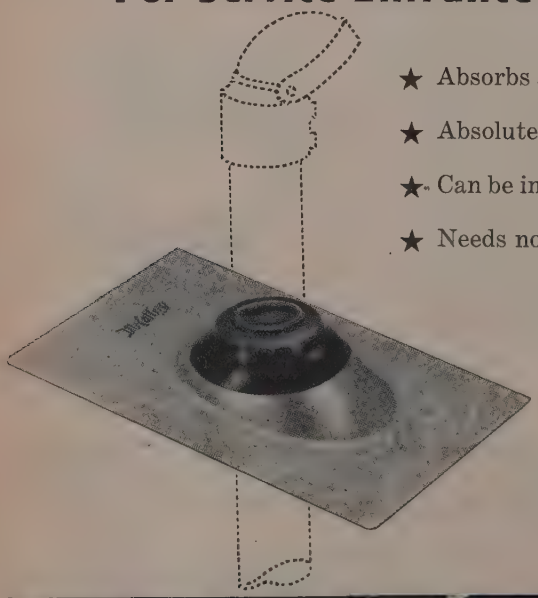

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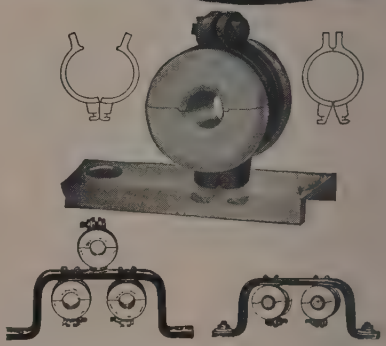

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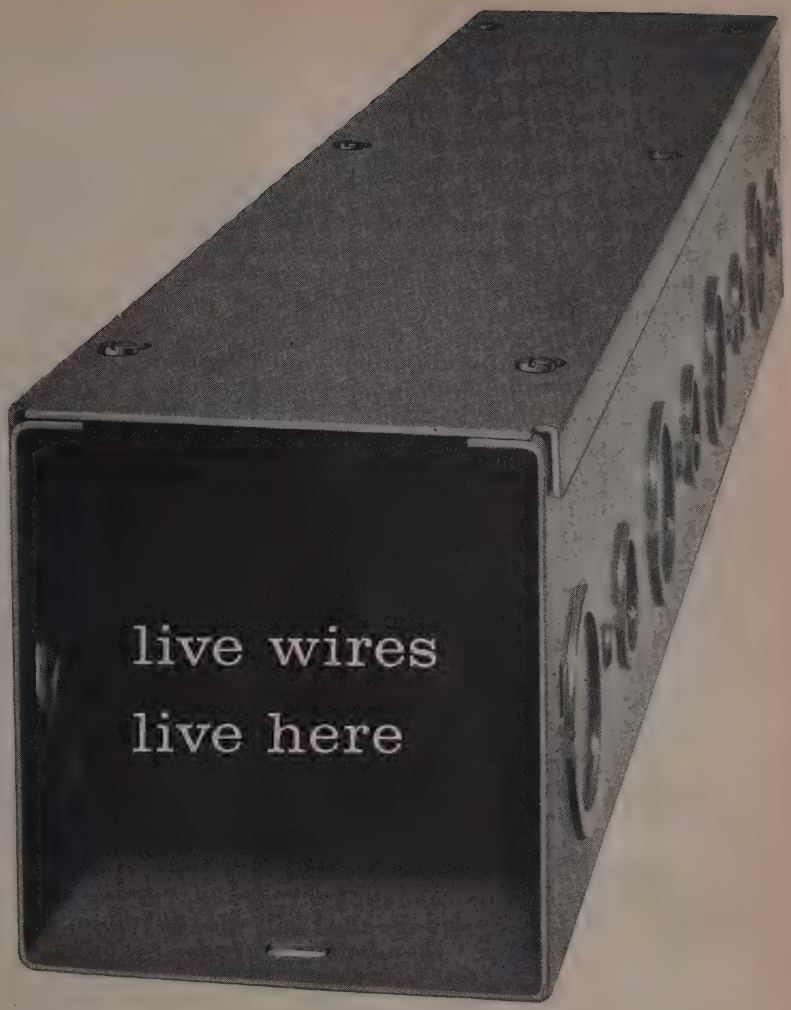

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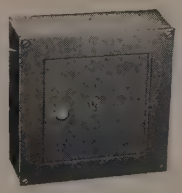
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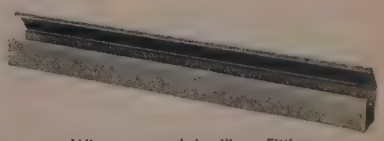
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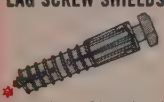

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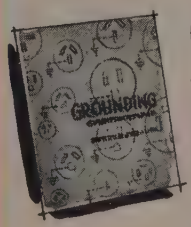

12-page, 8½" x 11" booklet recounts evolution of grounding code and how Hubbell products meet requirements. Includes all seven grounding types, both U-shaped devices and "Twist-Lock" units, with related configurations. Order **H-1998**

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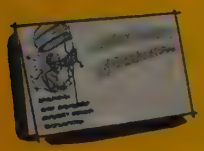

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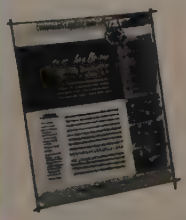

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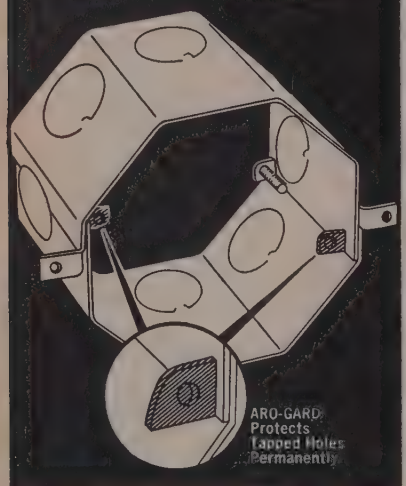
KEEPS CONCRETE OUT OF TAPPED HOLES IN CONCRETE RINGS



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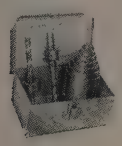

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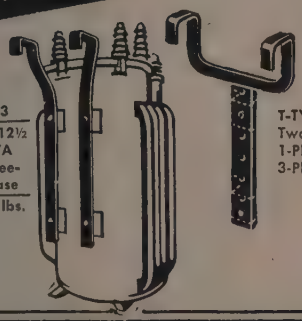

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Weight	46 lbs.	100 lbs.

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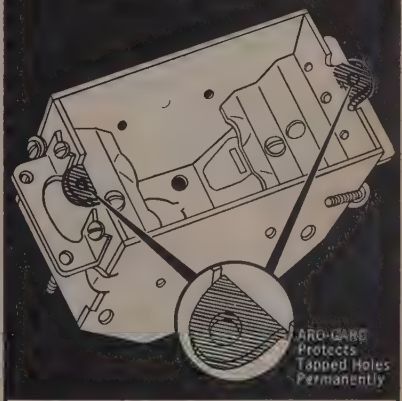
ARO-GARD PROTECTIVE COATING* TRADE MARK

-KEEPS PLASTER OUT OF TAPPED HOLES IN SWITCH BOX EARS!



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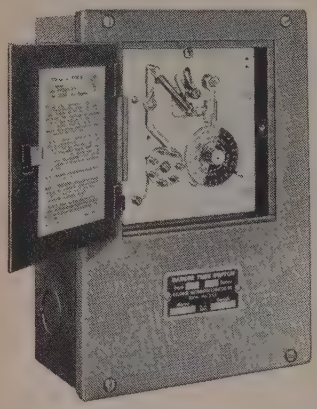
SPECIFY RELIANCE TIME SWITCHES



- Three basic models satisfy 90% of all applications.
- Only Reliance has a T-rated 70 ampere switch
- Reliance assures full scale quality at competitive prices

BADGER 70 BECOMES NEWEST STANDARD

Featuring rugged construction, the Badger has *Dura-treated* copper contacts with pressure type terminals. Heavy non-ferrous gears run with steel pinions. Heavy-duty synchronous motor for indoor or outdoor installation. NEMA standard cabinets, flush or surface mounted. Vernier time set. Optional features include omitting device, extra trippers and one-hour dial.

MODEL 400

Reliance also manufactures a full line of general purpose time switches. These include the versatile 30 amp. Model W and the budget-priced 40 amp. Model 400. Model W is available in 7 standard types. Silver contacts. Non-ferrous gears run with steel pinions. One piece, deep drawn steel cabinet with hinged cover. Combination knockouts. One or two circuit control. Model 400 has all the convenience features of higher priced models.

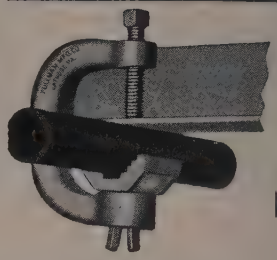
Write for Latest Descriptive Literature and Prices

RELIANCE TIME CONTROLS, INC.

1937 Mead Street • Racine, Wis.

Latrobe PRODUCTS

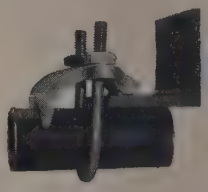
★ FLOOR BOXES ★ WIRING SPECIALTIES ★



PIPE or CONDUIT HANGERS

For hanging ½" thru 2½" pipe or conduit to steel beams up thru ⅜" thick—parallel or at right angle—no drilling necessary. Ideal for confined areas.

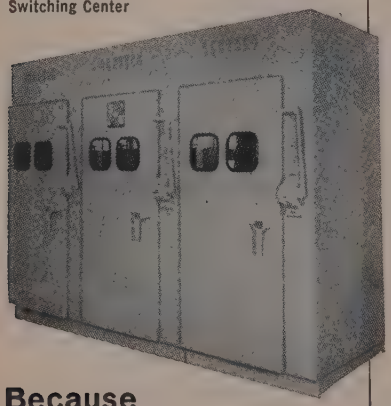
PIPE or CONDUIT CLAMPS



This clamp is made with a double safety bite of case hardened tool steel. Two models—right angle and parallel support—each model comes in 11 sizes for ⅜" thru 4" pipe or conduit.

FULLMAN MANUFACTURING CO.
LATROBE - - - PENNSYLVANIA

Switching Center



This Modern S & C Metalclad Switchgear Can Save You 50% and More on *High-Voltage* Power Circuit Protection

Because S & C Switchgear Has the *Right* Protection Built-in, You Save Money

FACT: Industrial circuits do not have transient faults; they cannot be re-energized immediately after an outage.

HENCE: Costly circuit breakers are unnecessary; S & C Power Fuses and Load Interrupters in high quality enclosures provide the right protection.

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S & C ELECTRIC COMPANY

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Power Fuses • Tool Operated Disconnects • Open and Enclosed Cutouts • Fuse Links • "Loadbuster" • Load Interrupters • Metalclad Switchgear

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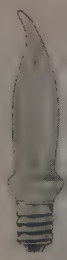
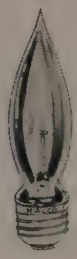
MADE IN U.S.A.

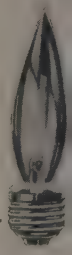
ELECTRIC WAX CANDLES
Polyethylene with ¼ watt neon filament for a truly beautiful and unusual effect. Medium or candelabra base, ¼" or 2" high, plain or drip.



CANDLE FLAME LAMPS
Flame shape, wide color choice, lovely effect.



NALCOBRITE LAMPS
Tungsten filaments for brighter decorative lighting.



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For soft, diffused lighting.

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NORTH AMERICAN Electric Lamp Co.

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Rapid Portable Silver Plating is true electroplating—the only kind permitted on military and naval equipment. MEETS ALL SPECIFICATIONS.

Quickly applied by anyone on contact surfaces of any size, even on aluminum—on bus bars, connectors, lugs, terminals, switches, fuses—assembled or unassembled equipment.

OTHER METALS AVAILABLE include nickel, tin, cadmium, zinc, copper, brass, silver, gold, lead, indium, Rapidmetal . . . for repair and maintenance of commercial platings, antifriction coatings, build-up, etc.

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QUALITY DESIGNED AIR COOLED—DRY TYPE TRANSFORMERS

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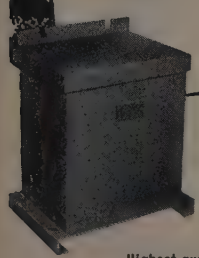

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Voltages
up to 15,000 V.

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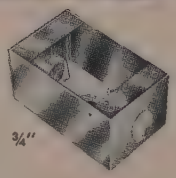

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Capacity: 6" x 10"

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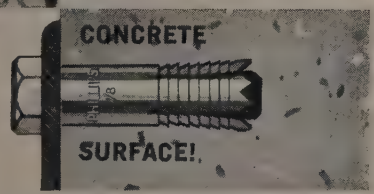

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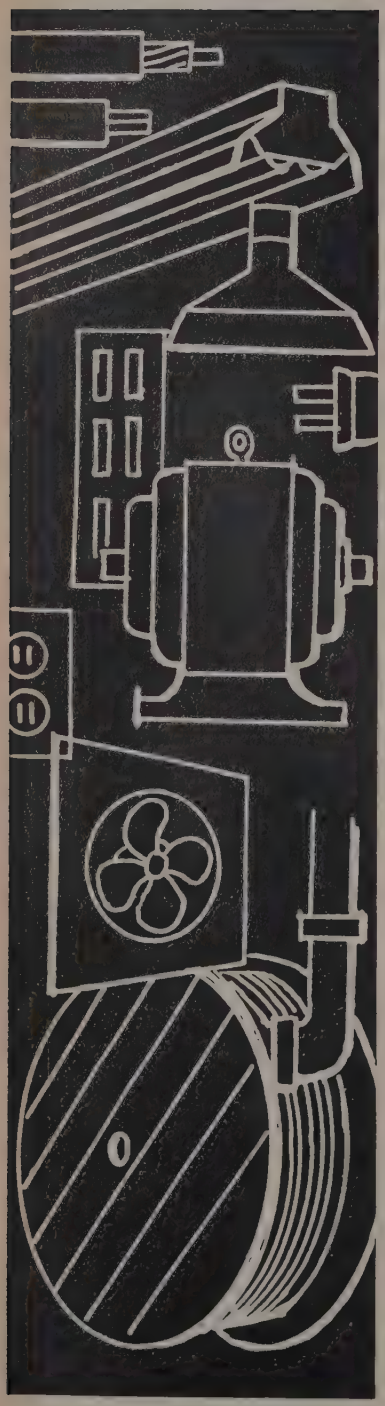

Classified listings of manufacturers of electrical products

Products in this section are arranged under the following 12 major sections:

1. **Power Transmission Line Equipment**
2. **Transformation & Conversion Eqpt.**
3. **Switching & Control Equipment**
4. **Protective Equipment**
5. **Wiring Devices & Boxes**
6. **Conductors & Connectors**
7. **Raceway**
8. **Motors & Generators**
9. **Lighting Equipment**
10. **Signal, Communication & Indicating Eqpt.**
11. **Heating & Cooling Equipment**
12. **Tools & Supplies**

Each of these sections is further broken down into individual classes of equipment. For example: Section 1, "Power Transmission Line Equipment," includes (A) CONDUCTOR SUPPORTING STRUCTURES, (B) LINE TRUCKS & MOBILE EQUIPMENT, (C) MANHOLE EQUIPMENT, and (D) POLE EQUIPMENT.

Where applicable, these classes are further subdivided. CONDUCTOR SUPPORTING STRUCTURES, for instance, include (1) Crossarms, (2) Poles, and (3) Towers. Companies manufacturing crossarms would be followed by a (1) in parentheses; those manufacturing poles would be followed by a (2); those manufacturing both would be followed by (1-2), etc.

The symbol (●) indicates that detailed information concerning the product may be found on the page indicated after the listing.

Technical Literature

Manuals, bulletins and other reference material on electrical products are listed following each of the twelve product classifications of the Product Directory. They may be obtained without cost or obligation by filling in the requested information on one of the Free Information cards on page 163.

PRODUCT INDEX

Manufacturers of equipment and materials normally used in electrical construction, plant operations and motor service work are listed in the Product Directory beginning on page 138. To find any specific product in this directory, locate the product first in the comprehensive alphabetical index below.

For example, this index shows "Cartridge fuses" to be listed under 4B. Turn to Section 4 and find "Cartridge fuses" as number 1 under "4B. Fuses". Companies listed under "Fuses" which are followed by the bracketed number (1) make cartridge fuses. Bold-face listings refer to advertising pages containing additional information.

A

Adapter removers, fuse....4C
Adapters, conduit bushing....7E
Adapters, grounding....5B
Adapters, socket....5C
Adhesive labels....12N
Adjustable floors....7C
Agitator-drive motors....8D
Air conditioners....11E
Air gap gauges....12E
Air handling equipment....11F
Air ionizers....11F
Air purifiers....11F
Aircraft motors....8D
Airport cable....6D
Airport lighting....9D
Alarms....10B, D, E
Alarms, burglar....10D
Alarms, fire....10E
Alarms, intrusion....10D
Alloy conduit....7D
Alloys, brazing....12V
Alternators....8G
Aluminum conduit....7D
Aluminum EMT....7F
Aluminum fittings....7E
Ammeters....10A
Amplifiers, magnetic....3K
Analyzers, circuit....10C
Analyzers, motor....10C
Analyzers, protective device....10C
Analyzers, system....10C
Anchors, earth....1D
Anchors, pole line....1D
Anchors, wall....12K
Annunciator wire....6D
Annunciators....10B
Antenna outlets....5B
Antenna systems....10F
Appliance cord sets....6E
Appliance switches....3J
Appliance wire & cable....6D
Arbor presses....12J
Arc lamp transformers....2B
Arc lamps....9F
Arc lighting equipment....9C
Arc suppressors....3P
Argon lamps....9G
Armature balancers....12E
Armature banders....12E
Armature banding....12V
Armature fields....12P
Armature holders & stands....12E
Armatures....12P
Arresters, lightning....4E
Asbestos-cement conduit....7D
Asbestos insulation....12Q
Asbestos tape....12S
Asbestos tubing....12T
Assemblies, multi-outlet....5B
Attachment caps & bases....5B
Automatic transfer switches....3G
Automotive motors....8D
Autostarters....3M
Autotransformer starters....3M
Autotransformers....2A, 2B
Auxiliary gutters....7A

B

Bags, tool....12A
Balancer sets....8F
Balancers, motor....12E
Ball bearings....12P
Ballast thermal protectors....4E
Ballasts, lamp....5C
Banders, armature....12E
Banding, armature....12V
Banding twine....12V
Barn wire....6D
Bars, commutator....12P
Bars, tamping....12A
Baseboard electric heaters....11A
Bases, attachment....5B
Bases, fuse cutout....4C
Bases, motor & generator....12P
Bathroom heaters....11A
Batteries....2E
Battery accessories....2G
Battery chargers....2F
Battery-operated fluorescent fixtures....9C
Battery switches....3J
Bayonet sockets....5C
Beacons....9D
Beads, insulating....12U
Beam clamps....6G
Bearing installers & extractors....12J
Bearings, motors & generator....12P
Bed lamps....9A
Beeswax....12V
Bells....10G
Bench lights....9E
Benders, conduit & EMT....12C
Benders, metal....12J
Benders, strand & cable....12B
Bending gages....12C
Bending machine pumps....12C
Bevelers, pipe....12C
Bin level indicators....10B
Binding posts....6F
Bins, parts storage....12D
Bins, truck....12D
Bipost sockets....5C
Blanks, knockout....5E
Blocks, cable-pulling....12B
Blocks, connecting....6F
Blocks, fuse....4C
Blocks, terminal....6F
Blowers....11F
Blowers, portable....12J
Blown fuse alarms....10B
Bobbins, coil....12F
Bodies, conduit....7E
Bodies, cord connection....5B
Bodies, truck....1B, 12D
Boilers, steam (electric)....11C
Bolt-sealing compound....12K
Bolts, expansion....12K
Bolts, toggle....12K
Borers, earth....1B
Boring tools, hand....12J
Boundary alarms....10D
Box hardware....5E
Box-to-conduit connectors....7E
Boxes, junction—pole base....5D
Boxes, terminal—motor & generator....12P
Boxes, wiring....5D
Braces, trench....1C
Brackets, motor-mounting....12N
Brackets, transformer mounting....2A
Brackets, wall lighting....9A
Brake motors....8D
Brakes, electric....3K
Brazing alloys....12V
Brazing transformers....2B
Breakers, circuit....4D
Brewery cable....6D
Bridge cable....6D
Bridge lamps....9A
Bridge lighting....9D
Bridges, measurement....10C
Bridle rings....6G
Brush holders....12P
Brush plating equipment....12J
Brush seaters....12E
Brushes, motor & generator....12P
Buckets, tool....12A
Building wire & cable....6D
Bulbs, lamp....9G
Burglar alarms....10D
Burnishers, contact....12L
Bus drop cable....6D
Busbar & supports....6H
Bushing adapters....7E
Bushings, conductor supporting....6G
Bushings, conduit....7E
Bushings, grounding....7E
Bushings, insulating....7E
Bushings, motor....12P
Bushings, sealing....7E
Bushings, strain relief....6G
Bushings, transformer....2A
Busway....7B
Buzzers....10G

C

Cab heaters....11A
Cabinet convectors....11A
Cabinets, equipment enclosing....5F
Cabinets, parts storage....12D
Cable....6A to 6E
Cable benders....12B
Cable connectors....5E, 6F
Cable drive-rings....6G
Cable duct shields....1C
Cable, electric heating....11A
Cable hangers....1C, 6G
Cable locators....10C
Cable pay-out reels & turntables....12A
Cable racks, hangers, arms, hooks and extensions (manhole)....1C
Cable sealing compound....12V
Cable spacers....6G
Cable splices & splicing equipment....6E
Cable tags....12V
Cable ties....6G
Cable-to-box connectors....5E
Cable-to-cable connectors....6F
Cable tracers....10C
Cable trays....6G
Cable, wire & cord....6A, B, C, D, E
Cable & wire supports....1C, 6G
Cable & wire tools....12B
Cable wrapping....12U
Calling systems....10F
Cambric insulation....12Q
Canopy switches....5A
Canvas, varnished....12U
Capacitor aging testers....10C
Capacitor protective gaps....4E
Capacitors, fluorescent lamp circuit....5C
Capacitors, motor start....12P
Capacitors, power-factor correcting....3P
Caps, attachment....5B
Caps, service entrance....7E
Car heaters....11A
Carbon brushes....12P
Carrier system controls....3K
Cartridge fuses....4B
Cartridge heaters....11C
Carts, reel....12B
Catenary supports....1D
Cathodic protection cable....6D
Cathodic protection equipment....4E
Ceiling heating cable & panels....11A
Cellophane tape....12R
Cellular-floor raceway....7C
Cellulose acetate tape....12S
Cement, commutator....12V
Cement, insulating....12U
Central furnaces, electric....11A
Central industrial control systems....3K
Centrifugal switches....3H
Chain, lighting fixture....5B
Changers, lamp....12L
Changers, transformer tap....2A
Channel, cable-supporting....6G
Chargers, battery....2F
Charging controls, battery....3J
Charge neutralizers & eliminators....12N
Cheeks, coil....12F
Chemical wire stripper....12V
Chests, tool....12D
Chime pushbuttons....3H
Chimes....10G
Church lighting....9C
Circle cutters....12M
Circuit analyzers....10C
Circuit-breaker cabinets....5F
Circuit-breaker protectors, fluorescent lamp....4E
Circuit-breaker testers....10A
Circuit breakers....4D
Circuit testers....10A
Circulating fans....11F
Clamp-on meters....10A
Clamps, beam....6G
Clamps, conduit....7E
Clamps, fuse clip....4C
Clamps, ground....6F
Clamps, wire & cable....6G
Clay conduit....7D
Clay duct dowel pins....1C
Cleaner, fuse clip....4C
Cleaners, vacuum....12J
Cleaning compound....12V
Cleats, wire & cable....6G
Climbing equipment....12A
Clip clamps & reducers, fuse....4C
Clip cleaner, fuse....4C
Clips, cable-supporting....6G
Clips, fuse....4C
Clips, test....12L
Clock systems....3K
Closed circuit television....10F
Cloth, duck....12U
Cloth, insulating....12U
Clothing, protective....12A, 12W
Clutches, electric....3K
Coil testers....10C
Coil tools & equipment....12F
Coiled cords....6E
Coils, motor & generator....12P
Coils, solenoid & magnet....12V
Cold cathode lamps....9F
Cold cathode lighting fixtures....9C
Collecting rings & shoes....6F
Color-coding tape....12R
Colored lamps....9G
Commercial lighting....9C
Communication cable....6D
Communication systems....10F
Commutator bars....12P
Commutator cement....12V
Commutators....12P
Compensators, motor....3M

Compound, bolt-sealing 12K
Compound, cable sealing....12V
Compound, cleaning 12V
Compound, conduit sealing....7E
Compound, fireproofing 12V
Compound, heat-conducting 12V
Compound, impregnating 12V
Compound, insulating 12U
Compound melting pots....12J
Compound, screw-anchoring 12K
Compound, splicing 12V
Compound, wire-pulling 12V
Compound, wire-stripping 12V
Concrete boxes 5D
Concrete floor raceway systems....7C
Concrete inserts 12K
Conditioners, air 11E
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Explosion-proof circuit breakers....4D
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Explosion-proof heaters 11A
Explosion-proof lighting 9C
Explosion-proof limit switches....3H
Explosion-proof motors 8C
Explosion-proof panelboards 3D
Explosion-proof plugs & receptacles....5B
Explosion-proof starters 3M
Explosion-proof switches 3G
Explosion-proof unions 5E
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F

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Fault locators 10C
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Ground detectors 10B
Ground resistance testers 10C
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Heating controls 3J
Heating elements & devices 11C
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Hermetic motors 8C
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Liquid-flow indicators & alarms 10B
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Liquid-level switches & controls 3H
Liquid-tight flexible metallic conduit 7C
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Magnet wire 6D
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Magnetic brakes 3K
Magnetic contactors & starters 3M
Magnetizers 12J
Magnetos 10C
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Meter testers 10A
Metering & control switchboards 3C
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Portable electric heaters....11A
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Protective enclosures, trolley wire....5F
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Protective relays 3N
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Protectors, motor overload....4E
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Pump controls 3J
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Pumps, manhole 1C
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R

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Rings, collecting 6F
Rings, commutator 12P
Rings, drive & bridle 6G
Rings, gimbal 9H
Rings, slip 12P
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Rods, armour 1D
Rods, ground 4E
Rods, insulation 12Q
Rolling stock, pole line....1B
Rotary converters 2D
Rotary relays 3N
Rotary switches 5A
Rotary switches, industrial....3K
Rubber tape 12R
Rubber tubing 12T
Running-thread, conduit 7E
Rust-preventives 12V

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Safety grounding equipment....12A
Safety switches 3G
Sanitary motors 8D
Saturable reactors 3K
Saws, commutator 12E
Saws, hole 12M
Saws, portable electric 12M
Scaffolding 12D
Scissors, electricians' 12L
Scrapers, slot 12E
Screw-anchoring compounds 12K
Screw-on wire connectors 6F
Screw sockets 5C
Screwdrivers, electricians' 12L
Screws, jack 12D
Sealed beam lamps 9G
Sealing compound, bolt....12K
Sealing compound, cable 12V
Sealing compound, conduit 7E
Sealing devices 12K
Seals, cable end 6F
Seals, conduit 7E
Seals, equipment 12K
Seals, meter 12V
Searchlights 9D
Seaters, brush 12E
Secondary batteries 2E
Selenium rectifiers 2C
Self-coiling cords 6E
Series street-lighting cable....6D
Series street-lighting lamps 9G
Service entrance & drop cable....6D
Service entrance hardware....7E
Service entrance panels....3D
Service entrance switches....3G
Service, estimating & pricing....12X
Service station lighting....9D
Servo components 3K
Setters, pole 1B
Sets, balancing 8F
Sets, generating 8F
Sets, M-G 8F
Sewing machine motors....8D
Shafts, flexible 12P
Shears, metal 12M
Sheet insulation 12Q
Shelving, parts storage 12D
Shields, cable 1C
Shields, expansion 12K
Shields, face protective 12W
Shields, manhole 1C
Shifters, phase 2D
Shims, motor & generator 12P
Shock-isolating mounts 12N
Shock-resistant lamps 9G
Shoes, collecting 6F
Showcase lighting 9C
Sidewalk boxes 5D
Sign cable, gas tube 6D
Sign lighting 9D
Signal & communication cable....6D
Signal equipment 10F
Signaling transformers 2B
Signs, lighted display....9C
Silent-type switches 5A
Silicon rectifiers 2C
Silicone insulation 12Q
Silicone sleeving 12T
Silicone tape 12S
Silk insulation 12Q
Single-phase motors 8B
Single-phasing protection 4E
Sirens 10C
Slate, electrical 12U
Sleeving, flexible 12T
Slip rings, motor & generator....12P
Slot scrapers & files....12E
Slot wedges & sticks 12V
Smoke alarms 10B

Snap-around meters 10A
Snap switches 3H
Snow-melting cable 11C
Snow-melting mats 11C
Soapstone conduit 7D
Socket accessories 5C
Sockets, lamp 5C
Sockets, lamp starter 5C
Sockets, meter 5H
Sodium-vapor fixtures 9C
Sodium-vapor lamps 9F
Soil-heating cable 11C
Solder 12V
Soldering equipment 12H
Soldering flux & paste 12V
Soldering transformers 2B
Solderless connectors 6F
Solenoid coils 12V
Solenoid-operated brakes 3K
Solenoid valves 3K
Solenoids 3K
Sound-level indicators 10B
Sound-powered telephones 10F
Sound systems 10F
Sounding devices 10G
Space heaters, electric 11A
Spacers, cable 6G
Speed regulators & controls 3M
Splash-proof motors 8C
Splices & kits 6F
Splicing compound 12V
Splicing tools 12B
Split-tinned connectors 6F
Spotlights 9D
Sprayers 12J
Spreaders, coil 12D
Spreaders, lamp 5E
Sprinkler alarms 10B
Stage lighting 9C
Stage lighting cable 6D
Stage switchboards 3C
Stair tread lights 9A
Stamping machines, nameplate 12J
Standards, lighting 9D
Stands, armature 12E
Stands, pipe vise 12C
Stands, soldering 12H
Stands, wire & cable 12B
Staplers, wire 12B
Staples, cable 6G
Star drills 12M
Starter sockets 5C
Starters, fluorescent lamp 5C
Starters, motor 3M
Static balancers 12E
Static controls 3K
Static converters 2D
Static-discharge grounding reels 6E
Static neutralizers & eliminators 12N
Stations, pushbutton 3M
Stator fields 12E
Steam boilers (electric) 11C
Steam-powered generators 8F
Steam radiators, electric 11A
Stepping motors 8D
Stepping switches 3K
Steps, manhole 1C
Sticks, disconnect 12A
Sticks, slot 12F
Stocks, conduit threading 12C
Stones, commutator 12E
Storage batteries 2E
Storage equipment 12E
Strain-relief bushings 6G
Strand benders 12B
Straps, cable 6G
Straps, conduit 7E
Street lighting 9D
Street-lighting cables 6D
Street-lighting controls 3J
Street-lighting lamps 9G
Street-lighting transformers 2B
Stringing equipment, wire 12A
Strip heaters 11C
Strip, renewable fuse 4C
Strip switches, continuous 3H
Strippers, wire 12B
Stripping compound, wire 12V
Stroboscopes 10C
Structure, cable-supporting 6G
Studs, lighting fixture box 5E
Submarine cable 6D
Submersible boxes 5D
Submersible motors 8C
Subminiature controls and switches 3H
Substations, unit 3A
Suburban cable 6D
Supports, box 5E
Supports, busbar 6H
Supports, catenary 1D
Supports, conductor 6G
Supports, conduit 7E
Supports, lighting fixture 5G, 9H
Supports, lighting fixture & raceway combined 7H
Suppressors, arc 3P
Surface raceway 7H
Surge protectors 4E
Swimming pool heaters 11C
Switch boxes 5D
Switch cabinets 5F
Switch-operating mechanisms 3J
Switchboard mats 12U
Switchboards 3C
Switches, disconnect 3M
Switches, drum 3M
Switches, explosion-proof 3G
Switches, field discharge 3K
Switches, power 3G
Switches, primary 3F
Switches, rotary, industrial 5K
Switches, wiring device 5A
Switchgear 3B
Switching systems, low-voltage 3L
Switchplates 5E
Synchronous converters 2D
Synchronous motors 8B
Synchroscopes 10B
System analyzers 10C

T

T-bars, lighting fixture 9H
Table lamps 9A
Tachometers 10A
Tags, wire & cable 12V
Takeoffs, power 12C
Tampers, coil 12D
Tamping bars 12A
Tanks, melting 12J
Tanks, transformer 2A
Tap-changing equipment 2A
Tap-changing transformers 2B
Tap switches 5A
Tape 12R, 12S
Tape, fish 12B
Tape, heating 11C
Tapers, coil 12F
Taps, cord-connecting 5B
Taps, fused 5B
Telephone systems 10F
Television/ac combination outlets 5B
Television antenna outlets 5B
Television, industrial & commercial 10F
Temperature controls 3J
Temperature indicators 10B
Temperature sequence controls 3H
Temporary power connectors 6F
Tents, manhole 1C
Terminal blocks 6F
Terminal boxes, motor & generator 12P
Terminals, wire & cable 6F
Terminators, cable 6F
Test leads & clips 12L
Testing instruments 10C
Textile motors 8D
Thawing transformers 2B
Theater switchboards 3C
Thermal lamp starters 5C
Thermal overload devices 4E
Thermal protectors, ballast 4E
Thermistors 3P
Thermostat wire & cable 6D
Thermostats 3J
Thinwall conduit 7G
Thread guards, conduit 7E
Thread lubricant 12V
Threaded inserts 12K
Threaders, conduit 12C
Through-cord switches 5A
Ties, cable 6G
Time-delay fuses 4B
Time switches & timers 3H
Timing motors 8D
Timing & time-delay relays 3N
Toggle bolts 12K
Toggle switches 5A
Toggle switches, industrial 3H
Tongs, pole 12A
Tool bags & holders 12L
Tool chests 12D
Tool motors 8D
Tool pickups & grapples 12C
Tool pouches, buckets & bags 12A, 12L
Tools, armature & stator repair 12E
Tools, cable & wire 12B
Tools, coil 12F
Tools, hand 12L
Tools, insulation 12G
Tools, linemen's 12A
Tools, portable electric 12M
Tools, fastening 12K
Tools, raceway 12C
Tools, shop—miscellaneous 12J
Tools, soldering 12H
Torches, soldering 12H
Torque wrenches 12L
Totally enclosed motors 8C
Towers, conductor-supporting 1A
Towers, floodlighting 9D
Towers, mobile construction 1B
Towers, work 12D
Tracers, cable 10C
Traffic signal lamps 9G
Traffic signals 9D
Trailer cable 6D
Trailer park panels 3D
Trailers, office & workshop 12D
Trailers, pole 1B
Transfer switches 3G
Transformer bushings 2A
Transformer cabinets 5F
Transformer gins 12A
Transformer mounting brackets 2A
Transformer radiators 2A
Transformer tap-changing equipment 2A
Transformers 2A, 2B
Transistorized telephones 10F
Trays, cable-supporting 6G
Tree trimmers & pruners 12A
Trench braces 1C
Trenchers 1B
Trenching tools, hand 12A
Trimmers, tree 12A
Trolley duct 7B
Trolley wire 6D
Trolley wire protective enclosures 5F
Trouble lamps 9E
Troughs, cable-supporting 6G
Troughs & mountings, meter 5H
Truck bodies 1B, 12D
Trucks, construction 1B
Trucks, hand 12D
Trucks, lift 12D
Trucks, maintenance 12D
Tube-to-cable connectors 6F
Tubes, fluorescent 9F
Tubes, lighting (standards) 9D
Tubing, electric metallic 7F
Tubing, flexible 12T
Tubing, insulation 12Q
Tumbler switches 5A
Turbine-powered generators 8F
Turners, paper 12G
Turns-ratio testers 10C
Turntables, cable 12A
Turntables, display 12N
Twine, banding & lacing 12M
Twisters, wire 12B
Two-way radio systems 10F

U

Ultra-violet lamps 9G
Ultra-violet display lighting 9C
Ultra-violet garden lighting 9A
Undercutters, armature 12E
Underfloor duct 7K
Underground boxes 5D
Underwater lighting 9D
Unions, explosion-proof 5E
Unit heaters, electric 11A
Unit substations 3A

V

Vacuum cleaners 12J
Vacuum switches 3H
Valves, electrically operated 3K
Vaporproof boxes 5D
Vaporproof circuit breakers 4D
Vaporproof hand lamps 9E
Vaporproof lighting fixtures 9C
Variable-speed drives 8J
Variable voltage transformers 2B
Varistors 3P
Varmeters 10A
Varnish 12U
Varnished cambric tape 12H
Varnished canvas 12U
Varnished insulation 12Q
Ventilating equipment 11F
Ventilators, manhole 1C
Vertical motors 8D
Vibration-isolating mounts 12N
Vibration meters 10A
Vises, pipe 12C
Volt-ammeters 10A
Voltage-regulating transformers 2B
Voltage regulators 3P
Voltage testers 10C
Voltmeters 10A
Vulcanizing equipment 12B

W

Wall air conditioners 11E
Wall anchors 12K
Wall plates 5E
Warning lights 9C
Washers, reducing 5E
Water-cooled leads 6D
Wattmeters 10A
Weatherproof boxes 5B, 5D
Weatherproof cabinets 5F
Weatherproof covers & plates 5E
Weatherproof lighting 9A, 9D
Weatherproof motors 8C
Weatherproof outlets 5B
Weatherproof sockets 5C
Weatherproof switches 5A
Wedge drivers & removers 12G
Wedges, slot 12M
Welders 12J
Welding cable 6D
Welding controls 3J
Welding flux 12M
Welding transformers 2B
Welding-type cable connectors 6F
Whistles 10G
Winches 12D
Winches, cable-pulling 12B
Winders, coil 12F
Windings, motor & generator 12P
Window air conditioners 11E
Wire cable & cords 6A, 6B, 6C, 6D, 6E
Wire & cable compounds 12M
Wire & cable reels 12B
Wire & cable supports 6G
Wire & cable tools 12B
Wire, fish 12B
Wire-installation guns 12B
Wire preheaters 11C
Wire-stringing equipment 12A
Wire & strip, fuse 4C
Wire strippers 12B
Wire-stripping compound 12M
Wire tags & markers 12M
Wireholders, pole line 1D
Wireways 7L
Wiring device boxes 5D
Wiring device switches 5A
Wiring devices ....5A to 5G
Wood preservative 12V
Work towers 12D
Working lights 9E
Wound-rotor motors 8B
Woven tape 12S
Wrapping, cable 12U
Wrenches, torque & impact 12L
Wrought-iron conduit 7D

Y

Yard lights 9D

See index for transmission line utilization equipment such as switches, transformers, cutouts, and pole line tools.

1A. CONDUCTOR SUPPORTING STRUCTURES

1. **Crossarms**
2. **Poles**
3. **Towers**

Basic equipment used to support outdoor power transmission line conductors.

American Creosote Works Inc 1305 Dublin St (Box 4008) New Orleans 18 La (1-2)
American Crossarm and Conduit Co 7726 Sheridan Rd Chicago 26 Ill (1)
Bell Lumber & Pole Co 524 Midland Bank Bldg Minneapolis 1 Minn (2)
Brooks Lumber Co P O Box 153 Bellingham Wash (1)
Brown Wood Preserving Co 409 Commonwealth Bldg Louisville 2 Ky (2)
Carney (B J) & Co 326 Peyton Bldg Spokane 8 Wash (2)
●GENERAL ELECTRIC SUPPLY CO 1260 Boston Ave Bridgeport Conn (1-2-3)—ADV PG 84-85
●GRAYBAR ELECTRIC CO INC 420 Lexington Ave NY 17 NY (2)—ADV PG 2
Haley (R G) & Co Inc 767 Spitzer Bldg Toledo 4 Ohio (1-2)
Hatheway & Patterson Co Inc 15 County St Mansfield Mass (1)
Hubbard & Co 6301 Butler St Pittsburgh 1 Pa (1)
Hughes Bros Inc Seward Neb (1-3)
Husky Products Inc 5300 Vine St Cincinnati 17 Ohio (3)
Joslyn Mfg & Supply Co 3700 S Morgan St Chicago 9 Ill (1-2)
Koppers Co Inc Wood Preserving Div 750 Koppers Bldg Pittsburgh 19 Pa (2)
Line Material Industries McGraw-Edison Co 700 W Michigan St Milwaukee Wis (1)
McFarland (L D) Co McFarland Bldg Sandpoint Idaho (2)
Miller (T R) Mill Co Inc Brewton Ala (1-2)
Poles Inc E 706 Sprague Ave Spokane 3 Wash (1-2)
Republic Creosoting Co 1615 Merchants Bank Bldg Indianapolis 4 Ind (1-2)
Texas Creosoting Co P O Box 131 Orange Tex (1-2)
●UNION METAL MFG CO 1432 Maple Ave NE Canton 5 Ohio (3)—ADV PG 119

1B. LINE TRUCKS & MOBILE EQUIPMENT

1. **Earth-boring trucks & machines**
2. **Mobile towers & lifts**
3. **Pole-setting trucks & bodies**
4. **Trailers & dinkies**
5. **Trenchers & ditchers**

Apparatus used to transport, erect and maintain power transmission line equipment.

Adams Engineering Co 31711 Solon Rd Solon Ohio (1-4)
Barber-Greene Co 400 N Highland Ave Aurora Ill (5)
Case (J I) Co Racine Wis (5)
Charles Machine Works Inc P O Box 66 Perry Okla (5)
Cleveland Trencher Co 20100 St Clair Ave Cleveland 17 Ohio (5)
Davis Mfg Co Inc 1500 S McLean Blvd Wichita Kans (4-5)
Earthworm Boring Machine Inc 1415 14th St (P O Box 1100) Santa Monica Calif (1)
F W D Corp 105 E 12 St Clintonville Wis (1-3)
Gar Wood Industries Inc Wayne Mich (5)
Highway Trailer Co 405 E Fulton St Edgerton Wis (1-4)
Holan Corp 4100 W 150 St Cleveland 35 Ohio (1-2-3-4)
McCabe-Powers Body Co 5900 N Broadway St Louis 15 Mo (1-2-3-4)
Mercury Hydraulics Inc 1632 Wazee St Denver 2 Colo (5)
Mobile Aerial Towers Inc 1730 N Harrison St Fort Wayne Ind (2)
Morrison Steel Products Inc 601 Amherst St Buffalo 7 NY (1-2-3)
Pitman Mfg Co Garner Ave & Duck Rd Grandview Mo (2)
Safety Live Line Tool Co 973 86th Ave Oakland 21 Calif (4)
Salem Tool Co 767 S Ellsworth Ave Salem Ohio (1)
Silent Hoist & Crane Co 841 63rd St Brooklyn 20 NY (2-3)
Stahl Metal Products Inc 4750 W 160 St Cleveland 35 Ohio (3-4)
Stampings Inc Suite 314 321 24th St Rock Island Ill (5)
Telsta Corp 2900 Spring St Redwood City Calif (2)
United States Air Conditioning Corp Skyworker Div Delaware Ohio (2)
Utility Body Co 1530 Wood St Oakland 7 Calif (2-3)
Williams (Hugh B) Mfg Co 8330 Lovett St (P O Box 7815) Dallas Tex (1-3)

1C. MANHOLE & TRENCH EQUIPMENT

1. **Cable duct shields**
2. **Cable racks, hangers, arms, hooks & extensions**
3. **Clay duct dowel pins**
4. **Guard rail, shields & tents**
5. **Manhole cover hooks**
6. **Manhole frames & covers**
7. **Manhole ladders**
8. **Manhole steps**
9. **Pulling-in irons**
10. **Pumps**
11. **Ventilators**
12. **Trench braces**

Basic underground equipment used in providing access to cable runs.

Alhambra Foundry Co Ltd 1147 Meridian Ave Alhambra Calif (6)
Aurora Pump Div New York Air Brake Co 54 Loucks St Aurora Ill (10)
Barry (William B) Co 117 Causeway St Boston 14 Mass (1)
Chain Belt Co 4701 W Greenfield Ave Milwaukee 1 Wis (10)
Chance (A B) Co 210 North Allen St Centralia Mo (1-2-3-7-9)
Chicago Pneumatic Tool Co 6 E 44 St NY 17 NY (10)
Cope (T J) Div Rome Cable Corp Third & Walnut Sts Collegeville 5 Pa (1-2-4-5-6-8-9)
Coppus Engineering Corp 344 Park Ave Worcester 10 Mass (11)
Hubbard & Co 6301 Butler St Pittsburgh 1 Pa (1-2-3-7-8-9)
Husky Products Inc 5300 Vine St Cincinnati 17 Ohio (2)
Hypro Engineering Inc 700 39th Ave N E Minneapolis 21 Minn (10)
Joslyn Mfg & Supply Co 3700 S Morgan St Chicago 9 Ill (2-9)
Kortick Mfg Co 5600 Third St San Francisco 24 Calif (2-3-4-5-7-8-9)
Line Material Industries McGraw-Edison Co 700 W Michigan St Milwaukee Wis (2-9)
Oliver Electrical Mfg Co P O Box 217 Battle Creek Mich (1-2-3-7-8-9)
Piqua Machine & Mfg Co 441 S College St Piqua Ohio (10)
St Louis Malleable Casting Co 7701 N Conduit Ave St Louis 15 Mo (2)
●STEEL CITY ELECTRIC CO 1207 Columbus Ave Pittsburgh 33 Pa (2)—ADV PG 104
Swett (A L) Iron Works 166 Glenwood Ave Medina NY (6-8-12)
United Electric Motor Co 178 Centre St NY 13 NY (11)
Utilities Service Co 1 Pine St Allentown Pa (2-7-8)

1D. POLE & TOWER EQUIPMENT

1. **Anchoring & guying materials**
2. **Dating nails & markers**
3. **Grounding equipment**
4. **Insulators & wireholders**
5. **Pole, crossarm & line hardware**
6. **Platforms & accessories**

Pole & crossarm hardware includes such materials as dead ends, armor rods, line splices, brackets, special bolts and pins, catenary supports, etc.

Acromark Co 320 Morrell St Elizabeth 4 NJ (2)
Blackburn (Jasper) Corp 1525 Woodson Rd St Louis 14 Mo (3)
Brewer-Titchener Corp 111 Port Watson St Cortland NY (5)
Chance (A B) Co 210 N Allen St Centralia Mo (4-5)
Chase Brass & Copper Co Inc 236 Grand St Waterbury 20 Conn (2)
Copperweld Steel Co Wire & Cable Div Glassport Pa (1-2-3)
Delta-Star Electric Div H K Porter Co Inc 2437 Fulton St Chicago 12 Ill (1-4)
Dixie Electrical Mfg Co P O Box 6325 Birmingham 7 Ala (1-3-4-5)
Electroline Mfg Co 2622 E 51st St Cleveland 4 Ohio (4)
Fanner Mfg Co Electrical Products Div Brookside Park Cleveland 9 Ohio (5)
Fargo Mfg Co Inc 845 Main St Poughkeepsie NY (5)
●GENERAL ELECTRIC SUPPLY CO 1260 Boston Ave Bridgeport Conn (1 thru 6)—ADV PG 84-85
●GRAYBAR ELECTRIC CO INC 420 Lexington Ave NY 17 NY (1-2-3-4-5)—ADV PG 2
Grip-Tite Mfg Co 115 W Jefferson St Winterset Iowa (1)
Haley (R G) & Co Inc 767 Spitzer Bldg Toledo 4 Ohio (5)
Hubbard & Co 6301 Butler St Pittsburgh 1 Pa (1-2-3-4-5)
Hughes Bros Inc Seward Neb (1-3-5-6)
Hussey (C G) & Co 2850 Second Ave Pittsburgh 19 Pa (2)
I-T-E Circuit Breaker Co Victor Insulators Div Victor NY (4)
Joslyn Mfg & Supply Co 3700 S Morgan St Chicago 9 Ill (1 thru 5)
Kearney (James R) Corp 4236 Clayton Ave St Louis 10 Mo (1)
Kimble Glass Co P O Box 1035 Toledo 1 Ohio (4)
Knox Porcelain Corp 2706 Mynders Ave P O Box 2031 Knoxville 1 Tenn (4)
Kortick Mfg Co 5600 Third St San Francisco 24 Calif (1 thru 6)
Lapp Insulator Co Inc 35 Gilbert St Leroy NY (4)
Line Material Industries McGraw-Edison Co 700 W Michigan St Milwaukee Wis (1-3-4-5)
Lint (Clyde W) 2323 W 18 St Chicago 8 Ill (4)
Mercury Products Inc Boston Post Rd Guilford Conn (3)
Ohio Brass Co 380 N Main St Mansfield Ohio (4)
Oliver Electrical Mfg Co P O Box 217 Battle Creek Mich (1-2-3-4-5)
Page Steel & Wire Div American Chain & Cable Co Inc P O Box 692 Monessen Pa (1)
Penn-Union Electric Corp 315 State St Erie Pa (1)
Pieper-Lillard Div Jasper Blackburn Corp 1525 Woodson Rd St Louis 14 Mo (1)
Porcelain Products Co 224 N Patterson St Carey Ohio (3-4-5)
Preformed Line Products Co 5349 St Clair Ave Cleveland 3 Ohio (1-5)
Premax Products Div Chisholm-Ryder Co College & Highland Aves Niagara Falls NY (2-3)
Railroad Accessories Corp Tenakill Park Cresskill NJ (5)
Safety Live Line Tool Co 973 86th Ave Oakland 21 Calif (3-6)
St Louis Malleable Casting Co 7701 N Conduit Ave St Louis 15 Mo (4-5)
South River Metal Products Co Inc 377 Turnpike South River NJ (1)
Superior Porcelain Co 931½ Market St Parkersburg W Va (4)
●THIEL TOOL & ENGINEERING CO 1417 N Market St St Louis 6 Mo (5)—ADV PG 127
Universal Clay Products Co 1558 First St Sandusky Ohio (4)
Utilities Service Co 1 Pine St Allentown Pa (1-2-3-4-5)
Weaver (J A) Co 2110 Howard St St Louis 6 Mo (3)

TECHNICAL LITERATURE

To obtain the following literature, enter the appropriate Code Numbers* on the Free Information cards elsewhere in this issue.

*Code No.	Description, Pages Catalog No. & Mfr.
1-1	Underground Iron Hardware; 16p; Cat. No. 2 (Alhambra)
1-2	Porcelain Insulators & Fittings; 52p; Cat. No. P-59 (Chance)
1-3	Ditchers; 16p; Cat. No. F-209 (Gar Wood)
1-4	Pole Line Hardware Construction Specialties; 186p; Cat. No. 61 (Kortick)

2A. POWER & LIGHTING TRANSFORMERS, AUTOTRANSFORMERS & ACCESSORIES

1. **Dry-type transformers**
2. **Liquid-filled transformers**
3. **Transformer radiators & tanks**
5. **Tap-changing equipment**
6. **Transformer mounting brackets**

General-purpose transformers for substations, building light and power, and transmission line distribution.

A C Transformer Corp 89 Madison St Newark NJ (1)
Acme Electric Corp 45 Water St Cuba NY (1)
●ALLIS-CHALMERS MFG CO 930 S 70th St Milwaukee 1 Wis (1-2)—ADV PG 74-75
American Rectifier Corp 95 Lafayette St NY 13 NY (1)
Atlantic Transformer Co 8330 Hegerman St Philadelphia 36 Pa (1)
Atlantic Transformer Div New London Instrument Co Inc 30 Hynes Ave Groton Conn (1-2)
Barkelew Electric Mfg Co 1905 Columbia Ave Middletown Ohio (5)
Central Transformer Corp P O Box 687 Pine Bluff Ark (1-2)
Crittenden Transformer Works Inc 13011 S Spring St Los Angeles 61 Calif (1)
Delta-Star Electric Div H K Porter Co Inc 2437 Fulton St Chicago 12 Ill (1-2)
Delta-Star Electric Div Hill Transformer Works H K Porter Co Inc 1030 Washington St San Carlos Calif (1-2)
Djeco Div Djordjevic Engineering Co 1933 N Damen Ave Chicago 47 Ill (1-2)
●DONGAN ELECTRIC MFG CO 2987-3001 Franklin St Detroit 7 Mich (1)—ADV PG 92
Eisler Engineering Co Inc 750 S 13 St Newark 3 NJ (1-2)
Electro Engineering Works 401 Preda St San Leandro Calif (1)
Erie Electric Co Inc 120 Church St Buffalo 2 NY (1-2)
Emsco Mfg Co P O Box 1039 Greenville Tex (1-2)
●FEDERAL PACIFIC ELECTRIC CO 50 Paris St Newark 5 NJ (1-2)—ADV PG 105
General Electric Co Apparatus Sales Schenectady 5 (NY) (1-2)
●GENERAL ELECTRIC SUPPLY CO 1260 Boston Ave Bridgeport Conn (1-2-3-5-6)—ADV PG 84-85
●GRAYBAR ELECTRIC CO INC 420 Lexington Ave NY 17 NY (1-2)—ADV PG 2
Hevi Duty Electric Co 3002 W Burleigh St (P O Box 563) Milwaukee 1 Wis (1)
Hindle Transformers Co Inc Woods Church Rd Flemington NJ (1)
Hughes Bros Inc Seward Neb (6)
I-T-E Circuit Breaker Co 1900 Hamilton St Philadelphia 30 Pa (1-2)
Jefferson Electric Co 25th & Madison Bellwood Ill (1)
Jeffries Transformer Co 610 Turner St Los Angeles 12 Calif (1)
Kortick Mfg Co 5600 Third St San Francisco 24 Calif (6)
Kuhlman Electric Co P O Box 288 Birmingham Mich (1-2)
Land-Air Inc 7444 W Wilson Ave Chicago 31 Ill (1)
Lindberg Engineering Co 2450 W Hubbard St Chicago 12 Ill (1)
Line Material Industries McGraw-Edison Co 700 W Michigan St Milwaukee Wis (1-2-5)
Magnatran Inc P O Box 211 Kearny NJ (1-2)
●MARCUS TRANSFORMER CO INC Leesville Ave Rahway NJ (1-2)—ADV PG 112
Moloney Electric Co 5390 Bircher Blvd St Louis 20 Mo (1-2-5)
●NIAGARA TRANSFORMER CORP 1751 Dale Rd Buffalo 25 New York (1-2)—ADV PG 86-87
Nothelfer Winding Labs Inc 220 Ewingville Rd (P O Box 455) Trenton 3 NJ (1)
Pennsylvania Transformer Div McGraw-Edison Co Box 330 Canonsburg Pa (1-2)
Precision Transformer Corp 2483 Greenleaf Ave Elk Grove Village Ill (1-2)
R T & E Corp 1900 East North St Waukesha Wis (2)
Raytheon Mfg Co Commercial Apparatus & Systems Div 100 River St Waltham 54 Mass (1)
Shaw-Perkins Mfg Co 201 E Carson St Pittsburgh 19 Pa (3)
●SORGEL ELECTRIC CO 838B W National Ave Milwaukee 4 Wis (1)—ADV PG 115
Standard Transformer Co 140 Dana St N E Warren Ohio (1-2)
●THIEL TOOL & ENGINEERING CO 1417 N Market St St Louis 6 Mo (6)—ADV PG 127
Uptegraff Mfg Co R E P O Box 182 Scottsdale Pa (1-2)
●UTILITY TRANSFORMER AND EQUIPMENT CO 702 Lynn Ave Baraboo Wis (1)—ADV PG 129
Wagner Electric Corp 6400 Plymouth Ave St Louis 33 Mo (1)
Westinghouse Electric Corp P O Box 2278 Pittsburgh 30 Pa (1-2-5)
●WESTINGHOUSE ELECTRIC SUPPLY CO 3 Gateway Center (Box 448) Pittsburgh 30 Pa (1-2)—ADV PG 2nd cover

2B. SPECIAL PURPOSE TRANSFORMERS

1. **Arc & discharge lamp**
2. **Control**
3. **Heating**
4. **Ignition**
5. **Instrument**
6. **Phase-changing or -shifting**
7. **Rectifying**
8. **Pipe thawing**
9. **Signalling**
10. **Tap-changing**
11. **Variable voltage**
12. **Voltage-regulating**
13. **Welding, soldering & brazing**
14. **Current-limiting**
15. **Isolating**
16. **Furnace control**
17. **Grounding**
18. **Machine tool**
19. **Loading**
20. **Mobile**
21. **Street lighting**

Transformers designed to serve specific or specialized functions or equipment.

A C Transformer Corp 89 Madison St Newark NJ (2-3-6-7-13)
Accurate Engineering Co 2005 Blue Island Ave Chicago 8 Ill (6)
Acme Electric Corp 45 Water St Cuba NY (1-2-5-6-7-9 thru 13-15-18)
Acro Welder Mfg Co 1719 W St Paul Ave Milwaukee 3 Wis (13)
Advance Transformer Co 2950 N Western Ave Chicago 18 Ill (1)
Allis-Chalmers Mfg Co 930 S 70th St Milwaukee 1 Wis (5-7-10-12)
Annis (R B) Co 1101 N Delaware St Indianapolis 2 Ind (5)
Arjac Products Inc 55-59 Halstead St Rochester 10 NY (1)
Associated Research Inc 3789 W Belmont Ave Chicago 18 Ill (5)
Atlantic Transformer Co 8330 Hegerman St Philadelphia 36 Pa (6)
Atlantic Transformer Div New London Instrument Co Inc 30 Hynes Ave Groton Conn (5-9)
Berkshire Transformer Corp Kent Conn (2-3-4-5-7-9-10-13)
Bush Transformer Corp 707 North St Endicott NY (2 thru 7-9-10-12)
Cable Electric Products Inc 234 Daboll St Providence 7 RI (9)
Central Transformer Co 900 W Jackson Blvd Chicago 7 Ill (2-9-13)
Cold Cathode Lighting Corp 76 S Bayles Ave Port Washington NY (1)
Crest Transformer Corp 1834-36 W North Ave Chicago 22 Ill (2-9)
Crittenden Transformer Works Inc 13011 S Spring St Los Angeles 61 Calif (3-5-7)
Cutler-Hammer Inc 228 N 12th St Milwaukee 1 Wis (2)
Davenport Mfg Div Duncan Electric Co Inc 2532 N Elston Ave Chicago 47 Ill (5)
Daystrom Inc Weston Instruments Div 614 Frelinghuysen Ave Newark 12 NJ (5)
Djeco Div Djordjevic Engineering Co 1933 N Damen Ave Chicago 47 Ill (2-5-7-10-12)
Dongan Electric Mfg Co 2987-3001 Franklin St Detroit 7 Mich (1-2-4-9-18)
Dormeyer Industries 3418 Milwaukee Ave Chicago 41 Ill (2-4-7-11)
Eagle Electric Mfg Co Inc 23-10 Bridge Plaza South Long Island City 1 NY (14)
Easco Products Inc (P O Box 587) Ypsilanti Mich (11)
Edwards Co Inc Norwalk Conn (9)
Electran Mfg Co 1901 Clybourn Ave Chicago 14 Ill (1-2-5-6-7-9-10-13)
Electrical Windings Inc 2015 N Kolmar Ave Chicago 39 Ill (5-15)
Electro Engineering Works 401 Preda St San Leandro Calif (6)
Faraday Inc 2011 W Beecher Rd Adrian Mich (5-9)
France Mfg Co 10325 Berea Rd Cleveland 2 Ohio (1-3)
General Electric Co Apparatus Sales Schenectady 5 NY (2 thru 7-9 thru 12)
General Radio Co West Concord Mass (11)
Harold Electric Co 210 E Adler St Walla Walla Wash (8)
Hevi Duty Electric Co 3002 W Burleigh St (P O Box 563) Milwaukee 1 Wis (2-3-6-10-12)
Hindle Transformer Co Inc Woods Church Rd Flemington NJ (2-3-6-7-9)
Hughely & Phillips Inc 3200 North San Fernando Blvd Burbank Calif (15)
Jefferson Electric Co 25th & Madison Bellwood Ill (1-2-4)
Jeffries Transformer Co 610 Turner St Los Angeles 12 Calif (2)
Knopp Inc 1307 66th St Oakland 8 Calif (5)
Kolton Electric Mfg Co 123 New Jersey Railroad Ave Newark 5 NJ (2-6)
Lee Electric Inc 566 52nd St West New York NJ (9)
Liberty Bell Mfg Co Swainsboro Ga (9)
●MARCUS TRANSFORMER CO INC Leesville Ave Rahway NJ (6-7-13-16)—ADV PG 112
McCarthy Electric Co 9640 Grinnell Detroit 13 Mich (13-16)
Midwest Electric Products Inc 1515 N Front St Mankato Minn (5)
Moloney Electric Co 5390 Bircher Blvd St Louis 20 Mo (7-10-12)
Nepo Mfg Co 4230 N Sayre Chicago 34 Ill (1)
●NIAGARA TRANSFORMER CORP 1751 Dale Rd Buffalo 25 NY (16)—ADV PG 86-87
Nothelfer Winding Labs Inc 220 Ewingville Rd (P O Box 455) Trenton 3 N J (3-5-7-13)
Nutone Inc Madison & Red Banks Roads Cincinnati 27 Ohio (9)
Ohmite Mfg Co 3601 Howard St Skokie Ill (11)
Opad Electric Co 43 Walker St New York 13 NY (7)
Partrick & Wilkins Co 51 N Seventh St Phila 6 Pa (9)
Pennsylvania Transformer Div McGraw-Edison Co Box 330 Canonsburg Pa (10-16)
Precision Transformer Corp 2483 Greenleaf Ave Elk Grove Village Ill (2-3-7-13)
Raytheon Mfg Co Commercial Apparatus & Systems Div 100 River St Waltham 54 Mass (7-13)
Rittenhouse Co Inc 68 East St Honeoye Falls NY (9)
Russell & Stoll Co Inc 125 Barclay St NY 7 NY (2)
Sangamo Electric Co 11th & Converse Springfield Ill (5)
Siegler Corp Magnetic Amplifiers Div 632 Tinton Ave New York 55 NY (2-7-12-18)
Sierra Electric Corp 15100 S Figueroa St (P O Box 85) Gardena Calif (7-14)
Simplex Co Inc 1139-41 N MacArthur Blvd Springfield Ill (5)
Sola Electric Div Basic Products Corp 1719 Busse Rd Elk Grove Ill (1-12)
Sorensen & Co Inc Richards Ave South Norwalk Conn (6-7-12)
●SORGEL ELECTRIC CO 838B W National Ave Milwaukee 4 Wis (2-3-6-7-8-9-10-13-14-17-18)—ADV PG 115
Southwestern Industrial Electronics Co 10201 Westheimer (P O Box 22187) Houston 27 Tex (5-7-12)
Standard Electrical Products Co 2240 E Third St Dayton 3 Ohio (11-12)
Standard Transformer Co 140 Dana St N E Warren Ohio (5)
States Co 19 New Park Ave Hartford 6 Conn (6)
Superior Electric Co 83 Laurel St Bristol Conn (5-11)
Taylor-Winfield Corp 1052 Mahoning Ave N W Warren Ohio (3-13)
Touch-Plate Mfg Corp Box 1970 Long Beach Calif (2)
Trine Mfg Corp 1430 Ferris Pl New York 61 NY (9)
United States Electronics Corp 275 Warren St Lyndhurst NJ (2)
United Transformer Co 150 Varick St New York 13 NY (1-2-3-5-7-9-11-12)
Uptegraff (R E) Mfg Co P O Box 182 Scottsdale Pa (5)
●UTILITY TRANSFORMER AND EQUIPMENT CO 702 Lynn Ave Baraboo Wis (6-7)—ADV PG 129
Victor Ventilator Div Philip Carey Mfg Co Middletown Ohio (9)
Western Electro-Mechanical Co Inc 300 Broadway Oakland 7 Calif (5)
Westinghouse Electric Corp P O Box 2278 Pittsburgh 30 Pa (18)

2C. RECTIFIERS

1. **Copper oxide**
2. **Electronic tube**
3. **Germanium**
4. **Mechanical**
5. **Selenium**
6. **Silicon**

Apparatus used for industrial applications which require conversion of alternating to direct current.

Accurate Engineering Co 2005 Blue Island Ave Chicago 8 Ill (5)

Allis-Chalmers Mfg Co 930 S 70th St Milwaukee 1 Wis (3-6)
American Rectifier Corp 95 Lafayette St NY 13 NY (5-6)
Bogue Electric Mfg Co 52 Iowa Ave Paterson 3 NJ (5-6)
Bradley Semiconductor Corp 275 Walton St New Haven 11 Conn (1-5-6)
Cathodic Protection Service 4601 Stanford St Houston Tex (5-6)
Conant Laboratories Box 3997 Bethany Station Lincoln 5 Neb (1-5)
Djeco Div Djordjevic Engineering Co 1933 N Damen Ave Chicago 47 Ill (2-3-5-6)
Gates Electronic Co 2090 Barnes Ave Bronx 62 NY (5-6)
General Electric Co Apparatus Sales Schenectady 5 NY (5-6)
Good-All Electric Mfg Co 112 W First St Ogalla Neb (5-6)
I-T-E Circuit Breaker Co 1900 Hamilton St Philadelphia 30 Pa (6)
ITT Components Div P O Box 412 Clifton NJ (5-6)
Kneisley Electric Co 2501-2509 Legrange St Toledo 3 Ohio (2-5-6)
Magnatran Inc P O Box 211 Kearny NJ (2)
Mallory (P R) & Co Inc 30 S Gray St Indianapolis 6 Ind (1)
Opad Electric Co 43 Walker St New York 13 NY (5)
Potter & Rayfield Inc P O Box 1042 Atlanta Ga (2)
Pyramid Electric Co 1445 Hudson Blvd North Bergen NJ (5)
Radio Receptor Co Inc 240 Wythe Ave Brooklyn 11 NY (5)
Rapid Electric Co Inc 2881 Middletown Rd Bronx 61 NY (5-6)
Reliance Electric & Engineering Co 24701 Euclid Ave Cleveland 17 Ohio (2)
Richardson-Allen Corp 116-15 Fifteenth Ave College Point LI NY (5-6)
Sanford Miller Co Inc 11 Lynch St Brooklyn 11 NY (5-6)
Schauer Mfg Corp 4500 Alpine Ave Cincinnati 42 Ohio (1)
Shrader (F W) Co 11623 S Broadway Los Angeles 61 Calif (5-6)
States Co 19 New Park Ave Hartford 6 Conn (3)
Stearns Electric Corp 120 N Broadway Milwaukee 2 Wis (5)
Sylvania Electric Products Inc 730 Third Ave New York 19 NY (3)
Syntron Co 690 Lexington Ave Homer City Pa (5-6)
Ther Electric & Machine Works 17 S Jefferson St Chicago 6 Ill (1-2-5)
Versabar Corp 14 Whyte St Jersey City NJ (6)
Weltronic Co 19500 W Eight Mile Rd Detroit 41 Mich (2)
Westinghouse Electric Corp P O Box 2278 Pittsburgh 30 Pa (2-3-5-6)

2D. CONVERTERS

1. **Frequency changers**
2. **Inverters**
3. **Phase converters & shifters**
4. **Static converters**
5. **Synchronous (rotary) converters**

Static and rotary converters are used to transform ac current to dc; inverters (static or rotary) are converters which transform dc to ac. Frequency changers convert normal 60-cycle current to a higher frequency; phase converters provide 2- or 3-phase power from a single-phase source, or vice versa.

Acme Electric Corp 45 Water St Cuba NY (3-4)
Allis (Louis) Co 427 East Stewart St Milwaukee 1 Wis (1)
Allis-Chalmers Mfg Co 930 S 70th St Milwaukee 1 Wis (1-4-5)
American Electronics Inc 655 West Washington Blvd Los Angeles 15 Calif (1)
Bogue Electric Mfg Co 52 Iowa Ave Paterson 3 NJ (1-2-5)
Carter Motor Co 2711 W George St Chicago 18 Ill (1-2-5)
Continental Electric Co 1234 S Prairie Ave (P O Box 895) Hawthorne Calif (1)
Continental Electric Co Inc 325 Ferry St Newark 5 NJ (1)
Cornell-Dubilier Electric Corp 333 Hamilton Blvd South Plainfield NJ (2)
D & R Ltd 402 E Gutierrez St P O Box 1500 Santa Barbara Calif (1)
Dalmotor Co 1375 Clay St Santa Clara Calif (1)
Djeco Div Djordjevic Engineering Co 1933 N Damen Ave Chicago 47 Ill (2-4)
Eicor Div F L Jacobs Co 4235 W North Ave Chicago 39 Ill (1-2-5)
Electric Machinery Mfg Co 800 Central Ave Minneapolis 13 Minn (1)
Electric Motors & Specialties Inc King & Hamsher Sts Garrett Ind (1)
Electric Specialty Co 211 South St Stamford Conn (1)
Elliott Co Jeannette Pa (1)
Fairbanks Morse & Co Electrical Div 303 N Henderson Freeport Ill (1)
General Electric Co Apparatus Sales Schenectady 5 NY (1 thru 5)
Georator Corp Manassas Va (1)
Hertner Electric Co 12690 Elmwood Ave Cleveland 11 Ohio (1-2-5)
Ideal Electric & Mfg Co East First St Mansfield Ohio (1-2-3-5)
Jerrold Electronics Corp Jerrold Bldg 15th & Lehigh Ave Philadelphia 32 Pa (1)
Kato Engineering Co 1442 First Ave Mankato Minn (1-2-3-5)
Katolight Corp First Ave at Chestnut (P O Box 891) Mankato Minn (5)
Knopp Inc 1307 66th St Oakland 8 Calif (3)
Kurz & Root Sales & Engineering Corp 232 East North Island St Appleton Wis (1)
Leach Corp 18435 Susana Rd Compton Calif (1 thru 5)
Minneapolis-Honeywell Regulator Co Boston Div 40 Life St Boston 35 Mass (4)
Robbins & Myers Inc 1345 Lagonda Ave Springfield Ohio (1)
Safety Electrical Equipment Corp 1187 Dixwell Ave New Haven Conn (1 thru 5)
Sangamo Electric Co 11th & Converse Springfield Ill (5)
Siegler Corp Magnetic Amplifiers Div 632 Tinton Ave New York 55 NY (2-4)
Sorensen & Co Richards Ave South Norwalk Conn (1-2)
States Co 19 New Park Ave Hartford 6 Conn (3)
Syntron Co 690 Lexington Ave Homer City Pa (4)
System Analyzer Corp 700 W State St Nokomis Ill (3)
Terado Co 1068 Raymond Ave St Paul 14 Minn (2)
Tocco Div Ohio Crankshaft Co 3800 Harvard Ave Cleveland 5 Ohio (1)
Weltronic Co 19500 W Eight Mile Rd Detroit 41 Mich (1)
Westinghouse Electric Corp P O Box 2278 Pittsburgh 30 Pa (1 thru 5)

2E. BATTERIES

1. **Primary, dry**
2. **Primary, wet**
3. **Secondary (storage)**
4. **Rechargeable dry cells**

Primary dry cells are replaced when exhausted; primary wet cells may be restored by replacing electrolyte and electrodes when necessary. Secondary or storage batteries are recharged using a primary source of electrical energy.

Bright Star Industries 600 Getty Ave Clifton NJ (1)
Burgess Battery Co Freeport Ill (1)
C & D Batteries Div Electric Autolite Co Washington & Cherry Sts Conshohocken Pa (3)
Carbone Corp 400 Myrtle Ave Boonton NJ (1-2)
Cellomatic Battery Corp Archbald Pa (3)
Dillin (Frank W) Corp 315 W Adams Blvd Los Angeles 7 Calif (3)
Dual-Lite Co Inc Newtown Conn (3)
DuBois Electric Storage Battery Co 500 W DuBois Ave DuBois Pa (3)
Edison (Thomas A) Industries McGraw-Edison Co Storage Battery Div West Orange NJ (3)
Exide Industrial Div Electric Storage Battery Co Rising Sun & Adams Ave (P O Box 5723) Philadelphia 20 Pa (3)
General Battery and Ceramic Corp Box 1262 Reading Pa (3)
Gould-National Batteries Inc Trenton 7 NJ (3)
Gulton Industries Inc Alkaline Battery Div Metuchen NJ (3)
Mallory (P R) & Co Inc 30 S Gray St Indianapolis 6 Ind (1)
Marathon Battery Co P O Box 298 Wausau Wis (1)
National Carbon Co 30 E 42 St New York 17 NY (1-2)
Nicad Div Gould-National Batteries Inc Easthampton Mass (3)
Perkins Battery Co 214 Golden Lane New Oxford Pa (3)
Scranton Storage Battery Corp Archbald Pa (3)
Sonotone Corp Elmsford NY (3-4)
Standard Electric Co Inc P O Box 6356 San Antonio 9 Tex (3)
Surrette Storage Battery Co Inc Jefferson Ave Salem Mass (3)
Westinghouse Electric Corp P O Box 2278 Pittsburgh 30 Pa
Willard Storage Battery Div Electric Storage Battery Co 246-286 E 131 St Cleveland 8 Ohio (3)
Wisco Div Electric Storage Battery Co 1222 18th St Racine Wis (3)
Yardney Electric Corp 40-50 Leonard St New York 13 NY (2-3)

2F. BATTERY CHARGERS

Equipment, complete with necessary controls, for restoring secondary batteries. May incorporate metallic-oxide rectifers, electronic tube rectifiers, or motor-generator set.

Accurate Engineering Co 2005 Blue Island Ave Chicago 8 Ill
Acme Electric Corp 45 Water St Cuba NY
American Rectifier Corp 95 Lafayette St NY 13 NY
Automatic Switch Co 50-56 Hanover Rd Florham Pk NJ
Blitz Electric Co 5713 Wentworth Ave Chicago 21 Ill
Bogue Electric Mfg Co 52 Iowa Ave Paterson 3 NJ
Control Panel Corp 4431 W Division St Chicago 51 Ill
Cornell-Dubilier Electric Corp 333 Hamilton Blvd South Plainfield NJ
Curtis Development & Mfg Co 3244 N 33 St Milwaukee 16 Wis
Djeco Div Djordjevic Engineering Co 1933 N Damen Ave Chicago 47 Ill
Edison (Thomas A) Industries McGraw-Edison Co Storage Battery Div West Orange NJ
Electric Products Co 7125 Clarkstone Rd Cleveland 12 Ohio
Electric Service Systems Inc 1330 Quincy St N E Minneapolis 13 Minn
Fairbanks Morse & Co Electrical Div 303 N Henderson Freeport Ill
Fox Products Co 4720 N 18 St Phila 41 Pa
Gates Electronic Co 2090 Barnes Ave Bronx 62 NY
General Battery and Ceramic Corp Box 1262 Reading Pa
General Electric Co Apparatus Sales Schenectady 5 NY
Gould-National Batteries Inc Trenton 7 NJ
Hertner Electric Co 12690 Elmwood Ave Cleveland 11 Ohio
Hobart Bros Hobart Square Troy 1 Ohio
Howard Industries Inc 1760 State St Racine Wis
International Electric Fence Co Inc Box 650 Albert Lea Minn
Jeta Inc Yonkers NY
Kato Engineering Co 1442 First Ave Mankato Minn
Katolight Corp First Ave at Chestnut (P O Box 891) Mankato Minn
Kohler Co Kohler Wis
Kurz & Root Sales & Engineering Corp 232 East North Island St Appleton Wis
Lincoln Electric Co 22801 St Clair Ave Cleveland 17 Ohio
Mallory (P R) & Co Inc 30 S Gray St Indianapolis 6 Ind
Motoresearch Co 1600 Junction Ave Racine Wis
Cnan Div Studebaker-Packard Corp 2515 University Ave SE Minneapolis 14 Minn
Pioneer Gen- E- Motor Co 5841 W Dickens St Chicago 39 Ill
Quick Charge Div Little Giant Corp 3810 N Tulsa St Oklahoma City Okla
Rex Metal Craft Inc 1717 Gent St Indianapolis 2 Ind
Richardson-Allen Corp 116-15 Fifteenth Ave College Point LI NY
Schauer Mfg Corp 4500 Alpine Ave Cincinnati 42 Ohio
Simplex Co Inc 1139-41 N MacArthur Blvd Springfield Ill
Sorenson & Co Inc Richards Ave South Norwalk Conn
Syntron Co 690 Lexington Ave Homer City Pa
Terado Co 1068 Raymond Ave St Paul 14 Minn
Triple-A Specialty Co 2835 N Western Ave Chicago 18 Ill
U S Electric Motor Co Cadiz Ohio
Universal Motor Co 438 Universal Dr Oshkosh Wis
Willard Storage Battery Div Electric Storage Battery Co 246-286 E 131 St Cleveland 8 Ohio
Winpower Mfg Co Newton Iowa

2G. BATTERY & CHARGING ACCESSORIES

Auxiliary equipment specifically intended to aid in the use and care of batteries and charging equipment, such as cable leads and clamps, testers, charging plugs and regulators.

Allen Electric and Equipment Co 2101-2117 N Pitcher St Kalamazoo Mich
Anderson (Albert & JM) Mfg Co 289 A St Boston 10 Mass
Belden Mfg Co P O Box 5070A Chicago 80 Ill
Blitz Electric Co 5713 Wentworth Ave Chicago 21 Ill
Bryant Mfg Co 410 N Paulina St Chicago 22 Ill
C & D Batteries Div Electric Autolite Co Washington & Cherry Sts Conshohocken Pa
Columbia Wire & Supply Co 2850 Irving Park Rd Chicago 18 Ill

Exide Industrial Div Electric Storage Battery Co Rising Sun & Adams Ave (P O Box 5723) Philadelphia 20 Pa
Fox Products Co 4720 N 18 St Phila 41 Pa
General Battery and Ceramic Corp Box 1262 Reading Pa
Goldak Co Inc 1544 W Glenoaks Blvd Glendale 1 Calif
Hessel (W F) Co Inc 74 Beekman St NY 38 NY
Jordan Electric Products Electric Storage Battery Co P O Box 6266 Cleveland 1 Ohio
Joy Mfg Co Electrical Products Div 1201 Macklind Ave St Louis 10 Mo
Mueller Electric Co 1555G E 31 St Cleveland 14 Ohio
New Jersey Zinc Co 160 Front St New York 38 NY
Ohmite Mfg Co 3601 Howard St Skokie Ill
Penn-Union Electric Corp 315 State St Erie Pa
Russell & Stoll Co Inc 125 Barclay St NY 7 NY
St Marys Carbon Co State St St Marys Pa
Sittler Corp 18 N Ada St Chicago 7 Ill
Stackpole Carbon Co Stackpole St St Marys Pa
Triple-A Specialty Co 2835 N Western Ave Chicago 18 Ill
Victor Instrument Mfg Co Inc 33 W 60 St New York 23 NY
Walker Brothers P O Box 33 Conshohocken Pa
Willard Storage Battery Div Electric Storage Battery Co 246-286 E 131 St Cleveland 8 Ohio

2H. POWER SUPPLIES

Bradley Semiconductor Corp 275 Welton St New Haven 11 Conn
Christie Electric Corp 3410 West 67 St Los Angeles 43 Calif
Gates Electronic Co 2090 Barnes Ave Bronx 62 NY
Harder (Donald C) Co 2580 K St San Diego 2 Calif
Hughes Aircraft Co Vacuum Tube Products Div 2020 Short St Oceanside Calif
Jordan Electronics 121 S Palm Ave Alhambra Calif
Kin Tel Div Cohu Electronics Inc 5725 Kearney Villa Rd San Diego 12 Calif
Sensitive Research Instrument Corp 310 Main St New Rochelle NY
Sorensen & Co Richards Ave South Norwalk Conn

TECHNICAL LITERATURE

To obtain the following literature, enter the appropriate Code Numbers* on the Free Information cards elsewhere in this issue.

*Code No.	Description, Pages Catalog No. & Mfr.
2-1	Dry Type Transformers; 23p; Cat. No. 701C (Jeffries)
2-2	Constant-Current Transformers; 14p; Cat. No. SL-703 (Moloney)
2-3	Custom Built Transformers; 20p (Nothelfer)
2-4	Transformers for Underground Distribution; 15p; Cat. No. 100 (RT&E)
2-5	Power Supply Handbook; 38p (Sorensen)

SECTION 3. SWITCHING & CONTROL EQUIPMENT

Indicating devices and alarms used in conjunction with switches and controls are listed in Section 10.

3A. UNIT SUBSTATIONS

Complete assemblies for transformation and distribution of power.

Acme Electric Corp 45 Water St Cuba NY
●ALLIS-CHALMERS MFG CO 930 S 70th St Milwaukee 1 Wis—ADV PG 74-75
Delta-Star Electric Div H K Porter Co Inc 2437 Fulton St Chicago 12 Ill
Empire Switchboard Co Inc 810 Fourth Ave Brooklyn 32 NY
Esco Mfg Co P O Box 1039 Greenville Tex
●FEDERAL PACIFIC ELECTRIC CO 50 Paris St Newark 5 NJ—ADV PG 105
General Electric Co Apparatus Sales Schenectady 5 NY
General Electric Co Distribution Assemblies Dept 41 Woodford Ave Plainville Conn
● GENERAL ELECTRIC SUPPLY CO 1260 Boston Ave Bridgeport Conn—ADV PG 84-85
Hughes Bros Inc Seward Neb
I-T-E Circuit Breaker Co 1900 Hamilton St Philadelphia 30 Pa
Kinney Electrical Mfg Co 678 Buckeye St Elgin Ill
Leonard Electric Mfg Co 3907 Perkins Ave Cleveland 14 Ohio
Line Material Industries McGraw-Edison Co 700 W Michigan St Milwaukee Wis
Metropolitan Electric Mfg Co 2250 Steinway St Long Island City 5 NY
Mullenbach Div Electric Machinery Mfg Co 2100 E 27 St Los Angeles 58 Calif
Nelson Electric Mfg Co P O Box 5385 Tulsa Okla
Niagara Transformer Corp 1751 Dale Rd Buffalo 25 NY
Pennsylvania Transformer Div McGraw-Edison Co Box 330 Canonsburg Pa
Royal Electric Mfg Co 1122 E 87 St Chicago 19 Ill
●SORGEL ELECTRIC CO 838B W National Ave Milwaukee 4 Wis—ADV PG 115
Southern Electrical Equipment Co 308 West Bland at Mint St Charlotte 3 NC
Square D Co Executive Plaza Park Ridge Ill
Standard Transformer Co 140 Dana St N E Warren Ohio
Westinghouse Electric Corp PO Box 2278 Pittsburgh 30 Pa
Young Electric & Mfg Co Inc 2134 Curtis Denver 2 Colo
Zinsco Electrical Products 729 Turner Los Angeles 12 Calif

3B. SWITCHGEAR

Enclosed assembly of switching and interrupting devices and associated equipment for distribution of power.

●ALLIS-CHALMERS MFG CO 930 S 70th St Milwaukee 1 Wis—ADV PG 74-75
Cleveland Switchboard Co 2925 E 79 St Cleveland 4 Ohio
Continental Electric Equipment Co Box 1055 Cincinnati 1 Ohio
Delta-Star Electric Div H K Porter Co Inc 2437 Fulton St Chicago 12 Ill
Empire Switchboard Co Inc 810 Fourth Ave Brooklyn 32 NY
●FEDERAL PACIFIC ELECTRIC CO 50 Paris St Newark 5 NJ—ADV PG 105
G & W Electric Specialty Co 3500 W 127 St Blue Island Ill
General Electric Co Apparatus Sales Schenectady 5 NY
● GENERAL ELECTRIC SUPPLY CO 1260 Boston Ave Bridgeport Conn ADV PG 84-85
●GRAYBAR ELECTRIC CO INC 420 Lexington Ave NY 17 NY—ADV PG 2
Gustaveson Inc 8600 Chestnut St Kansas City 32 Mo
I-T-E Circuit Breaker Co 1900 Hamilton St Philadelphia 30 Pa
Lake Erie Electric Mfg Inc 2952 W 22 St Erie Pa
Leonard Electric Mfg Co 3907 Perkins Ave Cleveland 14 Ohio
Marquette Electric Switchboard Co 311 N Desplanes St Chicago 6 Ill
Metropolitan Electric Mfg Co 2250 Steinway St Long Island City 5 NY
Mullenbach Div Electric Machinery Mfg Co 2100 E 27 St Los Angeles 58 Calif
Nelson Electric Mfg Co P O Box 5385 Tulsa Okla
Pennsylvania Transformer Div McGraw-Edison Co Box 330 Canonsburg Pa
Pyle-National Co 1344 N Kostner Ave Chicago 51 Ill
Russell & Stoll Co Inc 125 Barclay St NY 7 NY
●S & C ELECTRIC CO 4435 Ravenswood Ave Chicago 40 Ill—ADV PG 128
Siegler Corp Magnetic Amplifiers Div 632 Tinton Ave New York 55 NY
Square D Co Executive Plaza Park Ridge Ill
Westinghouse Electric Corp P O Box 2278 Pittsburgh 30 Pa
●WESTINGHOUSE ELECTRIC SUPPLY CO 3 Gateway Center (Box 448) Pittsburgh 30 Pa—ADV PG 2nd Cover
Young Electric & Mfg Co Inc 2134 Curtis Denver 2 Colo
Zinsco Electrical Products 729 Turner Los Angeles 12 Calif

3C. SWITCHBOARDS

1. Metering & control
2. Power & light
3. Stage
4. Laboratory & experimental

Metering & control boards and panels mount devices used to regulate, indicate and record operation of such equipment as boilers, turbines, furnaces and industrial processing equipment.

Adam (Frank) Electric Co 3647 Windsor Pl St Louis Mo (2-3)
Allis-Chalmers Mfg Co 930 S 70th St Milwaukee 1 Wis (1-2)
Alwalt Mfg Co Inc 1706 Lapham Dr (P O Box 1171) Modesto Calif (1)
Capitol Stage Lighting Co Inc 527 W 45 St New York 36 NY (3)
Century Lighting Inc 521 W 43 St New York 36 NY (3)
Clement Electric Co 223 Erie St N W Grand Rapids 2 Mich (1)
Cleveland Switchboard Co 2925 E 79 St Cleveland 4 Ohio (1-2-3)
Continental Electric Equipment Co Box 1055 Cincinnati 1 Ohio (1-2-3)
Control Panel Corp 4431 W Division St Chicago 51 Ill (1)
Cutler-Hammer Inc 228 N 12th St Milwaukee 1 Wis (2)
Delta-Star Electric Div H K Porter Co Inc 2437 Fulton St Chicago 12 Ill (1-2)
Dixie Controller Inc Post Office Box 5844 Birmingham 9 Ala (1-3)
Electric Machinery Mfg Co 800 Central Ave Minneapolis 13 Minn (1-2)
Empire Switchboard Co Inc 810 Fourth Ave Brooklyn 32 NY (1-2-3-4)
Esco Mfg Co P O Box 1039 Greenville Tex (2)
●FEDERAL PACIFIC ELECTRIC CO 50 Paris St Newark 5 NJ (2)—ADV PG 105
Gemco Electric Co 25685 W Eight Mile Rd Detroit 40 Mich (1-2)
General Electric Co Apparatus Sales Schenectady 5 NY (1-2)
General Electric Co Distribution Assemblies Dept 41 Woodford Ave Plainville Conn (1)
Gustaveson Inc 8600 Chestnut St Kansas City 30 Mo (2-3)
Hub Electric Co 2255 W Grand Ave Chicago 12 Ill (3)
I-T-E Circuit Breaker Co BullDog Electric Products Div 7610 Jos Campau Detroit Mich (2)
I-T-E Circuit Breaker Co Walker Div P O Box 2384 Station D Atlanta Ga (1-2)
Ideal Electric and Mfg Co East First St Mansfield Ohio (1-2)
Kato Engineering Co 1442 First Ave Mankato Minn (1)
Kinney Electrical Mfg Co 678 Buckeye St Elgin Ill (2)
Kliegl Bros Universal Electric Stage Lighting Co Inc 321 W 50 St NY 19 NY (3)
Kolton Electric Mfg Co 123 New Jersey Railroad Ave Newark 5 NJ (2)
Lake Erie Electric Mfg Inc 2952 W 22 St Erie Pa (1-2-3)
Lake Shore Electric Corp 205 Willis St Bedford Ohio (2)
Leeds & Northrup Co 4970 Stenton Ave Phila 44 Pa (1)
Leonard Electric Mfg Co 3907 Perkins Ave Cleveland 14 Ohio (3)

Machinery Electrification Inc 56 Hudson St Northboro Mass (2)
Major Equipment Co Inc 4603 W Fullerton Ave Chicago 39 Ill (3)
Marquette Electric Switchboard Co 311 N Desplaines St Chicago 6 Ill (2)
Metropolitan Electric Mfg Co 2250 Steinway St Long Island City 5 NY (1-2-3-4)
Mullenbach Div Electric Machinery Mfg Co 2100 E 27 St Los Angeles 58 Calif (2)
Nelson Electric Mfg Co P O Box 5385 Tulsa Okla (1-2)
Parker Electrical Mfg Co 221 Washington St Oakland 7 Calif (2)
Russell & Stoll Co Inc 125 Barclay St NY 7 NY (2)
Southern Electrical Equipment Co 308 West Bland at Mint St Charlotte 3 NC (2)
Square D Co Executive Plaza Park Ridge Ill (2-3)
Standard Electric Time Co 89 Logan St Springfield 2 Mass (4)
Superior Electric Co 83 Laurel St Bristol Conn (3)
Viking Instruments Inc East Haddam Conn (1)
Walker Div I-T-E Circuit Breaker Co 125 Bennett St NW Atlanta Ga (1-2)
Westinghouse Electric Corp P O Box 2278 Pittsburg 30 Pa (1-2)
●WESTINGHOUSE ELECTRIC SUPPLY CO 3 Gateway Center (Box 448) Pittsburgh 30 Pa (1-2)—ADV PG 2nd cover
Young Electric & Mfg Co Inc 2134 Curtis Denver 2 Colo (1-2-3)
Zinsco Electrical Products 729 Turner Los Angeles 12 Calif (1-2-3)

3D. PANELS & PANELBOARDS

1. Service, lighting & power
2. Explosion-proof
3. Trailer Park
4. Control

For circuit division and protection.

Adam (Frank) Electric Co 3647 Windsor Pl St Louis Mo (1)
Alwalt Mfg Co Inc 1706 Lapham Dr (P O Box 1171) Modesto Calif (1)
Appleton Electric Co 1701-59 Wellington Ave Chicago 13 Ill (1)
Automatic Control Co 995 University Ave St Paul 4 Minn (1)
Cleveland Switchboard Co 2925 E 79 St Cleveland 4 Ohio (1)
Continental Electric Equipment Co Box 1055 Cincinnati 1 Ohio (1)
Control Panel Corp 4431 W Division St Chicago 51 Ill (4)
Crouse-Hinds Co Syracuse 1 NY (2)
●CUTLER-HAMMER INC 228 N 12th St Milwaukee 1 Wis (1)—ADV PG 80-81
Empire Switchboard Co Inc 810 Fourth Ave Brooklyn 32 NY (1)
●FEDERAL PACIFIC ELECTRIC CO 50 Paris St Newark 5 NJ (1)—ADV PG 105
General Electric Co Apparatus Sales Schnectady 5 NY (1)
General Electric Co Circuit Protective Devices Dept 41 Woodford Ave Plainville Conn (1)
General Electric Co Distribution Assemblies Dept 41 Woodford Ave Plainville Conn (1)
● GENERAL ELECTRIC SUPPLY CO 1260 Boston Ave Bridgeport Conn (1-2-3)—ADV PG 84-85
General Switch Co 45 Roebling St Brooklyn 11 NY (1)
Gustaveson Inc 8600 Chestnut St Kansas City 30 Mo (1)
Hoffman Engineering Corp 1050 Tyler St Anoka Minn (3)
I-T-E Circuit Breaker Co BullDog Electric Products Div 7610 Jos Campau Detroit Mich (1)
I-T-E Circuit Breaker Co Walker Div P O Box 2384 Station D Atlanta Ga (1)
●KILLARK ELECTRIC MFG CO 3940 Easton Ave St Louis 13 Mo (1-2)—ADV PG 78-79
Kinney Electrical Mfg Co 678 Buckeye St Elgin Ill (1)
Kolton Electric Mfg Co 123 New Jersey Railroad Ave Newark 5 NJ (1)
Lake Erie Electric Mfg Inc 2952 W 22 St Erie Pa (1)
Leonard Electric Mfg Co 3907 Perkins Ave Cleveland 14 Ohio (1)
Machinery Electrification Inc 56 Hudson St Northboro Mass (1)
Magnetics Inc Box 391 Butler Pa (4)
Midwest Electric Products Inc 1515 N Front St Mankato Minn (1)
Mullenbach Div Electric Machinery Mfg Co 2100 E 27 St Los Angeles 58 Calif (1)
Murray Mfg Corp 1250 Atlantic Ave Brooklyn 16 NY (1)
Myers Electric Products Inc 3019 S Vail Ave Los Angeles 22 Calif (3)
Nelson Electric Mfg Co P O Box 5385 Tulsa Okla (1)
Parker Electrical Mfg Co 221 Washington St Oakland 7 Calif (1)
Pyle-National Co 1344 N Kostner Ave Chicago 51 Ill (1-2)
Russell & Stoll Co Inc 125 Barclay St NY 7 NY (1-2)
Square D Co Executive Plaza Park Ridge Ill (1-2-4)
Sun Electric Products Inc 28 S Day St Orange NJ (1)
United Enterprises 15735 S Paramount Blvd Paramount Calif (3)
Wadsworth Electric Mfg Co Inc 20-34 W 11th St (Box 272) Covington Ky (1)
Westinghouse Electric Corp P O Box 2278 Pittsburgh 30 Pa (1-2)
●WESTINGHOUSE ELECTRIC SUPPLY CO 3 Gateway Center (Box 448) Pittsburgh 30 Pa (1)—ADV PG 2nd cover
Young Electric & Mfg Co Inc 2134 Curtis Denver 2 Colo (1)
Zinsco Electrical Products 729 Turner Los Angeles 12 Calif (1)

3E. FRAMING & ENCLOSURES

Metal framing members, enclosures, and mounting structures for substation, switching, and control equipment.

Acme Steel Co 135th St & Perry Ave Chicago 27 Ill
American Steel & Iron Works 5801 S Lowe Ave Chicago 21 Ill
Chicago Wire Iron & Brass Works 2411 W Belmont Ave Chicago 18 Ill
Continental Electric Equipment Co Box 1055 Cincinnati 1 Ohio
Eliza Metal Products Co Box 408 Bridgeville Pa
Empire Switchboard Co Inc 810 Fourth Ave Brooklyn 32 NY
Falstrom Co 62 Falstrom Ct Passaic NJ
FlexAngle Corp 3760 Oakwood Ave (P O Box 418) Youngstown 1 Ohio
Gustaveson Inc 8600 Chestnut St Kansas City 30 Mo
Handy Angle Div Lug-All Co 355 Lancaster Ave Haverford Pa
●HOFFMAN ENGINEERING CORP 1050 Tyler St Anoka Minn—ADV PG 102-118
●HOPE ELECTRICAL PRODUCTS CO INC 27 Long Ave Hillside NJ—ADV PG 109
●HUENEFELD CO ENGINEERING PRODUCTS DIV 2701 Spring Grove Ave Cincinnati 25 Ohio—ADV PG 113
I-T-E Circuit Breaker Co Greensburg Div P O Box 98 Greensburg Pa
●KEYSTONE MFG CO 23328 Sherwood Rd Warren Mich—ADV PG 123
Kirk & Blum Mfg Co 3120 Forrer St Cincinnati 9 Ohio
Mult-A-Frame Corp 6401 Epworth Blvd Detroit 10 Mich
Parker Electrical Mfg Co 221 Washington St Oakland 7 Calif
Power-Strut Div Van Huffel Products Inc Dietz Rd Warren Ohio
Queen Products Co Inc Thirteenth & Rowan Sts Louisville 3 Ky
R & IE Equipment Div I-T-E Circuit Breaker Co Greensburg Pa
Russell & Stoll Co Inc 125 Barclay St NY 7 NY
●STEEL CITY ELECTRIC CO 1207 Columbus Ave Pittsburgh 33 Pa—ADV PG 104
●SPRING CITY ELECTRICAL MFG CO Spring City 85 Pa—ADV PG 114-116
Unistrut Products Co 933 Washington Blvd Chicago 7 Ill
Versabar Corp 14 Whyte St Jersey City NJ
Young Electric & Mfg Co Inc 2134 Curtis Denver 2 Colo

3F. PRIMARY SWITCHES

Switches (over 600v) for distribution pole lines, structures and equipment.

Chance (A B) Co 210 North Allen St Centralia Mo
Continental Electric Equipment Co Box 1055 Cincinnati 1 Ohio
Delta-Star Electric Div H K Porter Co Inc 2437 Fulton St Chicago 12 Ill
Electrical Engineers Equipment Co 25th Ave & Division St Melrose Park Ill
Federal Pacific Electric Co 50 Paris St Newark 5 NJ
G & W Electric Specialty Co 3500 W 127 St Blue Island Ill
General Electric Co Apparatus Sales Schenectady 5 NY
●GRAYBAR ELECTRIC CO INC 420 Lexington Ave NY 17 NY—ADV PG 2
I-T-E Circuit Breaker Co Greensburg Div P O Box 98 Greensburg Pa
Joslyn Mfg & Supply Co 3700 S Morgan St Chicago 9 Ill
Kearney (James R) Corp 4236 Clayton Ave St Louis 10 Mo
Line Material Industries McGraw-Edison Co 700 W Michigan St Milwaukee Wis
Memco Engineering & Mfg Co Inc Commack LI NY
Powercraft Corp 2215 De Kalb St St Louis 4 Mo
Powerdyne Inc 17150 Boones Ferry Rd Oswego Ore
Royal Electric Mfg Co 1122 E 87 St Chicago 19 Ill
●S & C ELECTRIC CO 4435 Ravenswood Ave Chicago 40 Ill—ADV PG 128
Southern Electrical Equipment Co 308 West Bland at Mint St Charlotte 3 NC
Square D Co Executive Plaza Park Ridge Ill
USCO Power Equipment Corp 829 N 36th Way Birmingham 4 Ala
Westinghouse Electric Corp P O Box 2278 Pittsburgh 30 Pa

3G. POWER SWITCHES

1. Automatic transfer
2. Dead-front switchboard
3. Isolating
4. Knife
5. Oil
6. Safety
7. Service entrance
8. Explosion-proof

Switches (600v and less) for power distribution purposes.

Adam (Frank) Electric Co 3647 Windsor Pl St Louis Mo (4-6-7)
Allen-Bradley Co 136 W Greenfield Ave Milwaukee 4 Wis (1-8)
American Electric Switch Div Clark Controller Co 1146 E 152 St Cleveland 10 Ohio (6-7)
Anderson (Albert & JM) Mfg Co 289 A St Boston 10 Mass (4)
Arrow-Hart & Hegeman Electric Co 103 Hawthorn St Hartford 6 Conn (6-7-8)
●AUTOMATIC SWITCH CO 50-56 Hanover Rd Florham Pk NJ (1)—ADV PG 71
Barber Electric Mfg Co Inc 30 Chestnut St N Attleboro Mass (4-6-7)
Barkelew Electric Mfg Co 1905 Columbia Ave Middletown Ohio (2-4)
Clark Controller Co 1146 E 152 St Cleveland 10 Ohio (4-7-8)
Connecticut Electric Mfg Co Main St Bantam Conn (4)
Controls Co of America Control Switch Div 1420 Delmar Dr Folcroft Pa (8)
Crouse-Hinds Co Syracuse 1 NY (6)
Cutler-Hammer Inc 228 N 12th St Milwaukee 1 Wis (1-2-3-4-6-7-8)
Delta-Star Electric Div H K Porter Co Inc 2437 Fulton St Chicago 12 Ill (1-6)
Derrick Light & Equipment Co 1201 E Daggett (P O Box 414) Fort Worth Tex (8)
Electric Distribution Products Inc 2200 31st St S W Allentown Pa (6)
Empire Switchboard Co Inc 810 Fourth Ave Brooklyn 32 NY (1 thru 5-7)
Esco Mfg Co P O Box 1039 Greenville Tex (5)
●FEDERAL PACIFIC ELECTRIC CO 50 Paris St Newark 5 NJ (6)—ADV PG 105
G & W Electric Specialty Co 3500 W 127 St Blue Island Ill (1-5)
Gemco Electric Co 25685 W Eight Mile Rd Detroit 40 Mich (8)
General Electric Co Apparatus Sales Schenectady 5 NY (1 thru 8)
General Electric Co Circuit Protective Devices Dept 41 Woodford Ave Plainville Conn (4-6-7-8)
General Switch Co 45 Roebling St Brooklyn 11 NY (6-7)
●GRAYBAR ELECTRIC CO INC 420 Lexington Ave NY 17 NY (1-4-5-6-7)—ADV PG 2
Hoffman Engineering Corp 1050 Tyler St Anoka Minn (4-7)
●HOPE ELECTRICAL PRODUCTS CO INC 27 Long Ave Hillside NJ (8)—ADV PG 109
I-T-E Circuit Breaker Co 1900 Hamilton St Philadelphia 30 Pa (2)
I-T-E Circuit Breaker Co BullDog Electric Products Div 7610 Jos Campau Detroit Mich (2-6-7)
I-T-E Circuit Breaker Co Greensburg Div P O Box 98 Greensburg Pa (3-7)
I-T-E Circuit Breaker Co Walker Div P O Box 2384 Station D Atlanta Ga (1-2-6-7)
Kearney (James R) Corp 4236 Clayton Ave St Louis 10 Mo (3)
●KILLARK ELECTRIC MFG CO 3940 Easton Ave St Louis 13 Mo (6-7-8)—ADV PG 78-79
Kolton Electric Mfg Co 123 New Jersey Railroad Ave Newark 5 NJ (6)
Lake Shore Electric Corp 205 Willis St Bedford Ohio (1)
Kelek Co 59 Davis Ave Norwood Mass (7)
Lumenite Electronic Corp 407 S Dearborn St Chicago 5 Ill (1)

Metropolitan Electric Mfg Co 2250 Steinway St Long Island City 5 NY (2-3-4-6-7)
Midwest Electric Products Inc 1515 N Front St Mankato Minn (7)
Monitor Controller Div Atlee Corp 99 Grove St Rockland Mass (1)
Murray Mfg Corp 1250 Atlantic Ave Brooklyn 16 NY (6-7)
Palmer Electric & Mfg Co 24 Water St Wakefield Mass (1-6-7)
Parker Electrical Mfg Co 221 Washington St Oakland 7 Calif (6-7)
Powercraft Corp 2215 De Kalb St St Louis 4 Mo (3-4)
Pringle Electrical Mfg Co 1900-1912 N Sixth St Philadelphia 22 Pa (3-4-7)
Pyle-National Co 1344 N Kostner Ave Chicago 51 Ill (6-8)
Rees (Mackworth G) Inc 1573 E Forest Ave Detroit 7 Mich (6)
Russell & Stoll Co Inc 125 Barclay St NY 7 NY (8)
Sangamo Electric Co 11th & Converse Springfield Ill (5)
Sierra Electric Corp 15100 S Figueroa Gardena Calif (4)
Square D Co Executive Plaza Park Ridge Ill (1-4-6-7-8)
Unimax Switch Div W L Maxson Corp Ives Rd Wallingford Conn (8)
Wadsworth Electric Mfg Co Inc 20-34 W 11th St (Box 272) Covington Ky (4-6-7)
Westinghouse Electric Corp P O Box 2278 Pittsburgh 30 Pa (1-2-3-4-5-7-8)
Westinghouse Electric Corp Standard Control Div Beaver Pa (6)
●WESTINGHOUSE ELECTRIC SUPPLY CO 3 Gateway Center (Box 448) Pittsburgh 30 Pa (1-2-3-4-5-6-7-8)—ADV PG 2nd Cover
Young Electric & Mfg Co Inc 2134 Curtis Denver 2 Colo (1-2-3-7)
Zenith Electric Co 155 W Walton St Chicago 10 Ill (1)
Zinsco Electrical Products 729 Turner Los Angeles 12 Calif (2-6)

3H. CONTROLS & CONTROL SWITCHES

1. Centrifugal
2. Flashing
3. Flow
4. Foot-operated
5. Footmat-operated
6. Key-operated
7. Limit (lever, toggle or pushbutton)
8. Liquid level (float)
9. Mercury
10. Photoelectric
11. Pressure or vacuum
12. Remote control
13. Rotary top
14. Timing
15. Miniature & subminiature
16. Molded power cord
17. Snap
19. Proximity
20. Temperature sequence
21. Pressure sequence
22. Pushbuttons, door chime
23. Dashpots
24. Pushbutton switches, industrial
25. Toggle switches, industrial
26. Limit switches, explosion-proof
27. Continuous strip controls

Physically actuated devices performing control functions through the energizing or de-energizing of electrical circuits.

Abrams Instrument Corp 606 E Shiawasee St Lansing Mich (10-14)
Acme Fire Alarm Company Inc 106 Seventh Ave New York 11 NY (8)
Acro Switch Div Robertshaw-Fulton Controls Co 2040 E Main St Columbus 16 Ohio (7-14-15)
Aemco Inc 10 State St Mankato Minn (2-14)
Aero Instrument Co 11423 Vanowen St North Hollywood Calif (11)
Aitken-Reed Inc 2802 Wollmer St Manitowac Wis (14)
Alcor Mfg Co 1140 S Seventh St De Kalb Ill (3-7-13-15-17)
Allen-Bradley Co 136 W Greenfield Ave Milwaukee 4 Wis (4-7-8-11-13-14)
Almo Mfg Co Inc 618 Jersey Ave Union Beach NJ (9)
American-Standard Controls Div 5900 Trumbull Ave Detroit 8 Mich (11)
Arrow-Hart & Hegeman Electric Co 103 Hawthorn St Hartford 6 Conn (13)
AutoFYRstop Co 2035 Washington Ave Phila 46 Pa (14)
Automatic Control Co 995 University Ave St Paul 4 Minn (3-8-9-11-12-14)
Automatic Devices Div American Machine & Metals Inc Sellersville Pa (14-20-21)
●AUTOMATIC SWITCH CO 50-56 Hanover Rd Florham Pk NJ (2-3-12)—ADV PG 71
Automation Products Inc 3030 Max Roy St Houston 24 Tex (8)
Automatic Timing & Controls Inc King of Prussia Pa (11-12-14)
Autotron Inc 3629 N Vermilion St Danville Ill (10-14)
B/W Controller Corp 2200 E Maple Rd Birmingham Mich (8)
Barkelew Electric Mfg Co 1905 Columbia Ave Middletown Ohio (13)
Beckley Electric Co Inc 468-470 Grand Ave Brooklyn 38 NY (2)
Bristol Motor Div Vocaline Co of America Inc Coulter St Old Saybrook Conn (14)
Cherry Electrical Products Corp 1650 Deerfield Rd Highland Park Ill (17)
Cincinnati Time Recorder Co 1733 Central Ave Cincinnati 14 Ohio (14)
Clark-Cooper Co Inc 317 N Market St Palmyra NJ (7)
Com-Pak-Ett Mfg Corp 650 Grand St Allegan Mich (10)
Controls Co of America Controls Switch Div 1420 Delmar Dr Folcroft Pa (7-15)
Controls Co of America 2450 N 32 St Milwaukee 45 Wis (3-8-11-14-17)
Convair Inc P O Box 9671 Pittsburgh 16 Pa (3)
Counter & Control Corp 4503 W Brown Deer Rd Milwaukee 23 Wis (14)
Cramer Controls Corp Main St Centerbrook Conn (14)
Crouse-Hinds Co Syracuse 1 NY (2)
Cutler-Hammer Inc 228 N 12th St Milwaukee 1 Wis (1-3-4-6-7-8-10-11-15)
Daystrom Inc Weston Instruments Div 614 Frelinghuysen Ave Newark 12 NJ (11)
Delta-Star Electric Div H K Porter Co Inc 2437 Fulton St Chicago 12 Ill (13)
Denison (R B) Mfg Co 386 Broadway Bedford Ohio (7)
Dietz (Henry G) Co Inc 12-16 Astoria Blvd Long Island City 2 NY (11-14)
Durant Mfg Co 1900 N Buffum St Milwaukee 1 Wis (10)
Dwyer (F W) Mfg Co Woodland at Greenwood (P O Box 373) Michigan City Ind (11)
Eagle Electric Mfg Co Inc 23-10 Bridge Plaza South Long Island City 1 NY (2)
Eastern Specialty Co 3617 N 8th St Phila 40 Pa (13)
Edco International Corp 20722 W Seven Mile Rd Detroit 19 Mich (14)
Elastic Stop Nut Corp of America Elizabeth Div 1027 Newark Ave Elizabeth NJ (14)
Electric Switch Corp 2320 S Tibbs Ave P O Box 41037 Indianapolis 41 Ind (9-14)
Electrical Mfg Co 425 Lake Ave Racine Wis (4)
Electro Switch Corp King Ave Weymouth 88 Mass (13-15-17)
Electronic Control Corp 15341 Dale Detroit 23 Mich (10)
Electronics Corp of America One Memorial Dr Cambridge Mass (10-12-14-15)
Euclid Electric & Mfg Co 50 Edwards St Madison Ohio (1)
Exide Industrial Div Electric Storage Battery Co Rising Sun & Adams Ave (P O Box 5723) Philadelphia 20 Pa (14)
Farmer Electric Products Co Inc 2300 Washington St Newton Lower Falls 62 Mass (10-14)
Fisher-Pierce Co 170 Pearl St South Braintree 85 Mass (10)
Fulton Sylphon Div Robertshaw-Fulton Controls Co Box 400 Knoxville 1 Tenn (11)
●FURNAS ELECTRIC CO 1067 McKee St Batavia Ill (4-7-8-11-13)—ADV PG 92
Gem Electric Mfg Co Inc 237 37th St Brooklyn NY (2)
Gemco Electric Co 25685 W Eight Mile Rd Detroit 40 Mich (7)
General Control Co 1200 Soldiers Field Rd Boston 34 Mass (4-14)
General Controls Co 801 Allen Ave Glendale Calif (3-4-7-9-11-14)
General Electric Co Air Conditioning Dept Central Air Conditioner Troup Highway Tyler Tex (14)
General Electric Co Apparatus Sales Schenectady 5 NY (4-7-8-10 thru 14)
Haft & Sons Inc 950 Kent Ave Brooklyn 5 NY (2)
Haledy Electronics Co 57 William St NY 5 NY (2-3-8-9-10-11)
Hankscraft Co Control Div Reedsburg Wis (14)
Haydon (A W) Co 4060 Ince Blvd Culver City Calif (14)
Haydon (A W) Co 232 N Elm St Waterbury Conn (14)
Haydon Div General Time Corp 245 E Elm St Torrington Conn (14)
Hays Mfg Co Automatic Controls Div 12th and Liberty Sts Erie 6 Pa (3)
Healy-Ruff Co Water Level Controls Div 2255 University Ave St Paul 14 Minn (8-11-12)
Heat-Timer Corp 657 Broadway New York 12 NY (14)
●HOFFMAN ENGINEERING CORP 1050 Tyler St Anoka Minn (10)—ADV PG 102-118
Hughes Aircraft Co Vacuum Tube Products Div 2020 Short St Oceanside Calif (14)
Hughey & Phillips Inc 3200 North San Fernando Blvd Burbank Calif (2-10)
Hypro Engineering Inc 700 39th Ave N E Minneapolis 21 Minn (11)
Industrial Automation Corp 2415 W Montrose Ave Chicago Ill (2-9)
●INTERNATIONAL REGISTER CO 2620 W Washington Blvd Chicago 12 Ill (14)—ADV PG 99
Iron Fireman Mfg Co Electronics Div 2838 S E 9th Ave Portland 2 Ore (14)
Jo-Bell Products Inc 5456 W 111 St Oak Lawn Ill (8-19)
Jordan Electronics 121 S Palm Ave Alhambra Calif (14)
Joy Mfg Co Electrical Products Div 1201 Macklind Ave St Louis 10 Mo (16-18)
Kneisley Electric Co 2501-2509 Lagrange St Toledo 3 Ohio (13)
Kulka Electric Corp 633 S Fulton Ave Mount Vernon NY (2)
Leach Corp 18435 Susana Rd Compton Calif (14-15)
Lee Electric Inc 566 52nd St West New York NJ (22)
Leviton Mfg Co Inc 236 Greenpoint Ave Brooklyn 22 NY (2-7)
Lewis Engineering Co 52 Rubber Ave Naugatuck Conn (13)
Licon Switch & Control Div Illinois Tool Works 6606 W Dakin St Chicago 34 Ill (7-15-18)
Line Electric Co 229 River St Orange NJ (4)
Line Material Industries McGraw-Edison Co 700 W Michigan St Milwaukee Wis (10)
Linemaster Switch Corp Woodstock Conn (4)
Machinery Electrification Inc 56 Hudson St Northboro Mass (8)
Magnetrol Inc 2110 S Marshall Blvd Chicago 23 Ill (3-8)
Mallory (P R) & Co Inc 30 S Gray St Indianapolis 6 Ind (13-14)
Manning Maxwell & Moore Inc 250 E Main St Stratford Conn (8-11-12)
McDonnell & Miller Inc 3500 N Spaulding Ave Chicago 18 Ill (3-8)
Mercoid Corp 4201 W Belmont Ave Chicago 41 Ill (9)
Micro Balancing Inc 191 Herricks Rd Garden City Park NY (10)
Micro Switch Div of Minneapolis-Honeywell Regulator Co Chicago & Spring Freeport Ill (4-7-9-12-13-15)
Midwest Electric Products Inc 1515 N Front St Mankato Minn (14)
Miller Harris Instrument Co 1134 S First St Milwaukee 4 Wis (14)
Minneapolis-Honeywell Regulator Co 2753 Fourth Ave S Minneapolis 8 Minn (11-14)
Monitor Controller Div Atlee Corp 99 Grove St Rockland Mass (7)
Mossman (Donald P) Inc P O Box 265 Brewster NY (7)
Nankervis (Geo L) Co 15300 Fullerton Ave Detroit 27 Mich (7)
National Acme Co Electrical Controls Div 170 E 131 St Cleveland 8 Ohio (7)
National Time & Signal Corp 21800 Wyoming Ave Detroit 37 Mich (14)
Network Industries Inc P O Box 397 Bayonne NJ (17)
Noel Mfg Co 3 W 18 St New York 11 NY (2)
Ohmite Mfg Co 3601 Howard St Skokie Ill (13)
Paragon Electric Co 1600 12th St Two Rivers Wis (14)
Partrick & Wilkins Co 51 N Seventh St Phila 6 Pa (5-6)
Penn Controls Inc Goshen Ind (3-8-11)
Photobell Co Inc 43 Vesey St New York 7 NY (10)
Photomation Inc 96 S Washington Ave Bergenfield NJ (10-15)
Post Electronic Products 12 Lothrop St Beverly Mass (10-14)
Powrex Switch Co 36 Pleasant St Watertown Mass (9)
Progress Mfg Co Inc Castor Ave & Tulip St Philadelphia 34 Pa (10)
Recora Co Inc Powis Rd (Box 68) St Charles Ill (4-5)
Rees (Mackworth G) Inc 1573 E Forest Ave Detroit 7 Mich (4-6-7)
Reliance Time Controls Inc 1927 Mead St Racine Wis (14)
Reynolds Electric Co 3000 River Rd River Grove Ill (2)
Rhodes (M H) Inc 30 Bartholomew Ave Hartford 6 Conn (14)
Ripley Co Inc Factory St Middletown Conn (10)
Rittenhouse Co Inc 68 East St Honeoye Falls NY (22)
Robot Industries Inc 7041 Orchard St Dearborn Mich (5)
Rodale Mfg Co Inc 6th & Minor Sts Emmaus Pa (2)
Roth Controls Inc Box 900 Evanston Ill (10)
Sangamo Electric Co 11th & Converse Springfield Ill (7-14)
Sargent Electric Corp 630 Merrick Rd Lynbrook NY (7)
Scaico Controls Inc P O Box 41 Delanco NJ (11-12-15)
Seely Instrument Co Inc 377 Fourth St (P O Box 387) Niagara Falls NY (14)
Shallcross Mfg Co Preston St Selma NC (7-13)
Siegler Corp Magnetic Amplifiers Div 632 Tinton Ave New York 55 NY (10-12)
Sierra Electric Corp 15100 S Figueroa St (P O Box 85) Gardena Calif (17)
Square D Co Executive Plaza Park Ridge Ill (4-6-7-8-11-12-13-14-19)

Standard Electric Time Co 89 Logan St Springfield 2 Mass (14)
Star-A Electric Mfg Co Inc 269 Meserole St Brooklyn 6 NY (2)
Supreme Electric Products Co 194 Vassar St Rochester 7 NY (14)
Technical Electronics Co 4060 Ince Blvd Culver City Calif (14)
Tigerman Engineering Co 4332 N Western Ave Chicago 18 Ill (9)
Tork Time Controls Inc 1000 Grove St Mt Vernon NY (14)
Trine Mfg Corp 1430 Ferris Place New York 61 NY (22)
Unimax Switch Div W L Maxson Corp Ives Rd Wallingford Conn (4-7)
Vemaline Products Co 511 Commerce St Franklin Lake NJ (4-14)
Viking Instruments Inc East Haddam Conn (2-3-8-11)
Wallace & Tiernan Inc 25 Main St Belleville NJ (2)
Walser Automatic Timer Corp 420 Lexington Ave New York 17 NY (14)
Warrick (Chas F) Co 1964 W Eleven Mile Rd Berkley Mich (8)
Webster Electric Co 1900 Clark St Racine Wis (14)
Weltronic Co 19500 W Eight Mile Rd Detroit 41 Mich (14)
Westinghouse Electric Corp P O Box 2278 Pittsburgh 30 Pa (1-9-12-14-15)
Westinghouse Electric Corp Standard Control Div Beaver Pa (7-8)
White-Rodgers Co 9797 Reavis Rd St Louis 23 Mo (7-11-12)
Wilson (G C) & Co 1915 Eighth Ave Huntington W Va (14)
Winterburn Mfg Co P O Box 386 Putnam Conn (3)
Workrite Mfg Co 612-620 Colorado Ave Santa Monica Calif (4-7-11)
●**ZENITH ELECTRIC CO 155 W Walton St Chicago 10 Ill (12-14)—ADV PG 114**

3J. EQUIPMENT SWITCHES & CONTROLS

1. **Appliance switches**
2. **Battery switches & charging controls**
3. **Door & gate openers**
4. **Electric fence controllers**
5. **Electroplating controls**
6. **Generator controls**
7. **Heating system & temperature controls**
8. **Light dimmers**
9. **Street-lighting controls**
10. **Switch-operating mechanisms**
11. **Welder controls**
12. **Crane controls**
13. **Pump controls**

Devices intended for use with specific items of equipment.

ACF Industries Inc ACF Electronics Div Riverdale Md (8)
Acme Wire Co Utility Products Div 1255 Dixwell Ave New Haven Conn (9)
Acro Switch Div Robertshaw-Fulton Controls Co 2040 E Main St Columbus 16 Ohio (1-7)
Aitken-Reed Inc 2802 Wollmer St Manitowac Wis (10)
Ajax Electric Co 954 Frankford Ave Phila 23 Pa (7)
Alcor Mfg Co 1140 S Seventh St De Kalb Ill (1)
Allen-Bradley Co 136 W Greenfield Ave Milwaukee 4 Wis (7)
Alliance Mfg Co Inc Lake Park Blvd Alliance Ohio (3)
American-Standard Controls Div 5900 Trumbull Ave Detroit 8 Mich (1-7)
Amprobe Instrument Corp 630 Merrick Rd Lynbrook NY (7)
Arjac Products Inc 55-59 Halstead St Rochester 10 NY (4)
Ark-Les Switch Corp 51 Water St Watertown Mass (1)
Arrow-Hart & Hegeman Electric Co 103 Hawthorn St Hartford 6 Conn (1)
Assembly Products Inc Chesterland 31 Ohio (7)
Atlas Overhead Door Co Mill St at Reading Railroad Quakertown Pa (3)
Automatic Control Co 995 University Ave St Paul 4 Minn (7-10)
Automatic Devices Div American Machine & Metals Inc Sellersville Pa (7)
Berko Electric Mfg Corp 182-20 Liberty Ave Jamaica 12 NY (7)
Bryant Electric Co 1421 State St (Box D Barnum Sta) Bridgeport 2 Conn (1)
Burling Instrument Co Inc 16 River Rd Chatham NJ (7)
Capitol Stage Lighting Co Inc 527 W 45 St New York 36 NY (8)
Ceilheat Inc 5212 Homberg Drive (P O Box 10066) Knoxville Tenn (7)
Century Lighting Inc 521 W 43 St New York 36 NY (8)
Circle F Mfg Co 720 Monmouth St Trenton 4 NJ (1-2)
Cold Cathode Lighting Corp 76 S Bayles Ave Port Washington NY (8)
Columbia Electric Mfg Co 4519 Hamilton Ave Cleveland 14 Ohio (5)
Connecticut Electric Mfg Co Main St Bantam Conn (2)
Controls Co of America 2450 N 32 St Milwaukee 45 Wisc (1-7-10)
Counter & Control Corp 4503 W Brown Deer Rd Milwaukee 23 Wis (10)
Crane (H W) Co 15 N 9th Ave Maywood Ill (3)
Cutler-Hammer Inc 228 N 12th St Milwaukee 1 Wis (1-5-7-10-12-15)
Day-Ray Products Inc 1133 Mission St South Pasadena Calif (8)
Delta-Star Electric Div H K Porter Co Inc 2437 Fulton St Chicago 12 Ill (10)
Dixie Controller Inc Post Office Box 5844 Birmingham 9 Ala (13)
Eagle Electric Mfg Co Inc 23-10 Bridge Plaza South Long Island City 1 NY (1)
Easy-Heat Inc 555 N Michigan St Lakeville Ind (7)
Ebert Electronics Corp 212-26 Jamaica Ave Queens Village 28 LI NY (9)
Edco International Corp 20722 W Seven Mile Rd Detroit 19 Mich (1)
Ederer Engineering Co 2943 1st Ave S Seattle 4 Wash (12)
Edwards Co Inc Norwalk Conn (3)
Electric Machinery Mfg Co 800 Central Ave Minneapolis 13 Minn (6)
Electric Power Door Co Inc 2127 E Lake St Minneapolis 7 Minn (3)
Electric Service Systems Inc 1330 Quincy St N E Minneapolis 13 Minn (4)
Electronic Control Corp 15341 Dale Detroit 23 Mich (3)
Electronics Corp of America One Memorial Dr Cambridge Mass (3-9)
Electrovector Inc 475 Flushing Ave Brooklyn 5 NY (7)
Engelhard Industries Inc Industrial Equipment Div Instruments & Systems Sec 850 Passaic Ave East Newark NJ (7)
Exide Industrial Div Electric Storage Battery Co Rising Sun & Adams Ave (P O Box 5723) Philadelphia 20 Pa (2)
Federal Pacific Electric Co 50 Paris St Newark 5 NJ (1)
Fenwal Inc Pleasant St Ashland Mass (7)
Fisher-Pierce Co 170 Pearl St South Braintree 85 Mass (9)
Friez Instrument Div Bendix Aviation Corp Baltimore 4 Md (7)
Fulton Sylphon Div Robertshaw-Fulton Controls Co Box 400 Knoxville 1 Tenn (7)
General Controls Co 801 Allen Ave Glendale Calif (7)
General Electric Co Apparatus Sales Schenectady 5 NY (2-5-6-7-9-10-11)
General Electric Co Circuit Protective Devices Dept 41 Woodford Ave Plainville Conn (2)
General Electric Co Wiring Device Dept 95 Hathaway St Providence RI (1-7)
Guardian Electric Mfg Co 1550 W Carroll Ave Chicago 7 Ill (1)
H-B Instrument Co American & Bristol Sts Philadelphia 40 Pa (7-9)
Hankscraft Co Control Div Reedsburg Wis (7)
Harnischfeger Corp 4400 W National Ave Milwaukee 46 Wis (12)
Hart Mfg Co 164 Bartholomew Ave Hartford Conn (7)
Howell Mfg Co 21 N Morehall Rd Paoli Pa (3)
●**HUBBELL (HARVEY) INC State St & Bostwick Ave Bridgeport 2 Conn (1)—ADV PG 125**
Hughes Aircraft Co Vacuum Tube Products Div 2020 Short St Oceanside Calif (11)
Ideal Electric and Mfg Co East First St Mansfield Ohio (6)
Illinois Testing Laboratories Inc 420 N LaSalle St Chicago 10 Ill (7)
Industrial Electric Switches of Indiana Box 218 New Augusta Ind (11)
International Electric Fence Co Inc Box 650 Albert Lea Minn (4)
Joslyn Mfg & Supply Co 3700 S Morgan St Chicago 9 Ill (9)
Kato Engineering Co 1442 First Ave Mankato Minn (6)
Knox Porcelain Corp 2706 Mynders Ave (P O Box 2031) Knoxville 1 Tenn (2)
Kulka Electric Corp 633 S Fulton Ave Mount Vernon NY (8)
Lake Shore Electric Corp 205 Willis St Bedford Ohio (6)
Leach Corp 18435 Susana Rd Compton Calif (6-8)
Leviton Mfg Co Inc 236 Greenpoint Ave Brooklyn 22 NY (1-2)
Lincoln Electric Co 22801 St Clair Ave Cleveland 17 Ohio (11)
Line Material Industries McGraw-Edison Co 700 W Michigan St Milwaukee Wis (9)
Magnetrol Inc 2110 S Marshall Blvd Chicago 23 Ill (13)
Marquette Electric Switchboard Co 311 N Desplaines St Chicago 6 Ill (6)
Marsh Instrument Co 3501 Howard St Skokie Ill (7)
McCorkle (D H) Co Box 97 Station A Berkeley Calif (7)
McLarty Systems 2600 Dickman Rd Battle Creek Mich (7)
Mechanical Industries Production Co 217-223 Ash St Akron 8 Ohio (7)
Memco Engineering & Mfg Co Inc Commack LI NY (10)
Mercoid Corp 4201 W Belmont Ave Chicago 41 Ill (7)
Micro Switch Div of Minneapolis-Honeywell Regulator Co Chicago & Spring Freeport Ill (1)
Minneapolis-Honeywell Regulator Co 2753 Fourth Ave S Minneapolis 8 Minn (7-8)
Minneapolis-Honeywell Regulator Co Boston Div 40 Life St Boston 35 Mass (7)
Minneapolis-Honeywell Regulator Co Industrial Div Wayne & Windrim Aves Phila 44 Pa (7)
Modernheat Cable Corp P O Box 754 Kingsport Tenn (7)
National Cathode Corp 317 E 34 St New York 16 NY (8)
Palmer Electric & Mfg Co 24 Water St Wakefield Mass (7)
Partlow Corp 230 Campion Rd New Hartford NY (7)
Pass & Seymour Inc Syracuse 9 NY (1)
Penn Controls Inc Goshen Ind (7)
Precision Thermometer & Instrument Co 1434 Brandywine St Philadelphia 30 Pa (7)
Progress Mfg Co Inc Castor Ave & Tulip St Philadelphia 34 Pa (8)
Quincy Mfg Co Box 916 Tiffin Ohio (3)
Rhodes (M H) Inc 30 Bartholomew Ave Hartford 6 Conn (1)
Richards-Wilcox Mfg Co 150 Third St Aurora Ill (3)
Ripley Co Inc Factory St Middletown Conn (9)
Roberson Inc 1539 E 103 St Seattle 55 Wash (7)
Robot Industries Inc 7041 Orchard St Dearborn Mich (3)
Robotron Corp 21300 W Eight Mile Rd Detroit 19 Mich (11)
Roth Controls Inc Box 900 Evanston Ill (9)
Sair Corp 9802 Euclid Ave Cleveland 6 Ohio (7)
Sargent Electric Corp 650 Merrick Rd Lynbrook NY (1)
Scaico Controls Inc P O Box 41 Delanco NJ (7)
Shox-Stok Inc Wellington Ohio (4)
Siegler Corp Magnetic Amplifiers Div 632 Tinton Ave New York 55 NY (2-6-8)
Signet Controls 3205 S E 13th Ave Portland 2 Ore (7)
Simplex Co Inc 1139-41 N MacArthur Blvd Springfield Ill (6)
Slater Electric & Mfg Co Inc 45 Sea Cliff Ave Glen Cove NY (1)
Smith-Gates Corp Farmington Conn (7)
Square D Co Executive Plaza Park Ridge Ill (8)
Stackpole Carbon Co Stackpole St St Marys Pa (1)
Sunwarm Inc 1601 Jared Dr (P O Box 266) Kingsport Tenn (7)
Superior Electric Co 83 Laurel St Bristol Conn (8)
Swan Mfg Co 1801 W 26 St Vancouver Wash (7)
Taylor-Winfield Corp 1052 Mahoning Ave N W Warren Ohio (11)
Thermolyne Corp 513 Huff St Dubuque Iowa (7)
Tocco Div Ohio Crankshift Co 3800 Harvard Ave Cleveland 5 Ohio (6)
Trine Mfg Corp 1430 Ferris Pl New York 61 NY (3)
Ulanet (George) Co 413-15 Market St Newark 5 NJ (7)
United Electric Controls Co 85 School St Watertown 72 Mass (7)
Velotron Inc 1186 Broadway New York 1 NY (7)
Ward Leonard Electric Co 28 South St Mount Vernon NY (8)
Waukesha Motor Co Waukesha Wis (6)
Weksler Instruments Corp 195 E Merrick Rd Freeport L I NY (7)
Weltronic Co 19500 W Eight Mile Rd Detroit 41 Mich (6-11)
Wesix Electric Heater Co 390 First St San Francisco 5 Calif (7)
West Instrument Corp 4363 W Montrose Ave Chicago 41 Ill (7)
Westinghouse Electric Corp P O Box 2278 Pittsburgh 30 Pa (1-6 thru 13)
White-Rodgers Co 9797 Reavis Rd St Louis 23 Mo (7)
Yardney Electric Corp 40-50 Leonard St New York 13 NY (7)

3K SPECIAL-FUNCTION CONTROLS

1. **Field-discharge switches**
2. **Frequency controls**
3. **Interlocks & electric locks**
4. **Magnetic amplifiers**
5. **Program clock systems**
6. **Saturable reactors**
7. **Servo components**
8. **Solenoids**
9. **Static controls**
10. **Electric brakes & clutches**
11. **Valves (electrically operated)**
12. **Carrier system controls**
13. **Machine & process controls**
14. **Permanent magnets**
15. **Peak load controls**
16. **Electromagnets**
17. **Central industrial control systems**
18. **Flame safeguard equipment**
19. **Rotary switches, industrial**
20. **Stepping switches**
21. **Level-indicating systems**
22. **Infrared detector controls**

Devices intended to accomplish specialized control functions.

Acme Electric Corp 45 Water St Cuba NY (6)
Acro Switch Div Robertshaw-Fulton Controls Co 2040 E Main St Columbus 16 Ohio (15)
Allen-Bradley Co 136 W Greenfield Ave Milwaukee 4 Wis (8)
Allis (Louis) Co 427 East Stewart St Milwaukee 1 Wis (2)
Allis-Chalmers Mfg Co 930 S 70th St Milwaukee 1 Wis (2-4-6-7-9-11)
American Rectifier Corp 95 Lafayette St NY 13 NY (10)
American-Standard Controls Div 5900 Trumbull Ave Detroit 8 Mich (11)
Atkomatic Valve Co Inc 545 W Abbott St Indianapolis Ind (11)
Auth Electric Co Inc 34-20 45th St LIC 1 NY (5)
Automatic Control Co 995 University Ave St Paul 4 Minn (5-7)
Automatic Devices Div American Machine & Metals Inc Sellersville Pa (5)
Automatic Switch Co 50-56 Hanover Rd Florham Pk NJ (1-8-11)
Automatic Timing & Controls Inc King of Prussia Pa (5-13-17)
B/W Controller Corp 2200 E Maple Rd Birmingham Mich (8)
Barkelew Electric Mfg Co 1905 Columbia Ave Middletown Ohio (1)
Barksdale Valves 5125 Alcoa Ave Los Angeles 58 Calif (11)
Berkshire Transformer Corp Kent Conn (6)
Bogue Electric Mfg Co 52 Iowa Ave Paterson 3 NJ (4-7)
Brach Mfg Corp 200 Central Ave Newark 3 NJ (4)
Bush Transformer Corp 707 North St Endicott NY (6)
Caltron Products Co 3518 W Pico Blvd Los Angeles 19 Calif (8-11)
Central Transformer Co 900 W Jackson Blvd Chicago 7 Ill (6)
Cincinnati Time Recorder Co 1733 Central Ave Cincinnati 14 Ohio (5)
Clark Controller Co 1146 E 152 St Cleveland 10 Ohio (11-13)
Comar Electric Co 3349 W Addison Chicago 18 Ill (8)
Controls Co of America Control Switch Div 1420 Delmar Dr Folcroft Pa (3)
Controls Co of America 2450 N 32 St Milwaukee 45 Wis (8-11)
Counter & Control Corp 4503 W Brown Deer Rd Milwaukee 23 Wis (5)
Crittenden Transformer Works Inc 13011 S Spring St Los Angeles 61 Calif (6)
Crucible Steel Co of America Oliver Bldg Mellon Sq Pittsburgh 22 Pa (14)
Cutler-Hammer Inc 228 N 12th St Milwaukee 1 Wis (3-4-5-8-9-10-11-12-13)
Delta-Star Electric Div H K Porter Co Inc 2437 Fulton St Chicago 12 Ill (3)
DeWalt Inc Fountain Ave Lancaster Pa (10)
Dings Brakes Inc 4740 W Electric Ave Milwaukee 46 Wis (10)
Dixie Controller Inc Post Office Box 5844 Birmingham 9 Ala (13-17)
Djeco Div Djordjevic Engineering Co 1933 N Damen Ave Chicago 47 Ill (4-6-9)
Dormeyer Industries 3418 Milwaukee Ave Chicago 41 Ill (6-8)
Dossert Mfg Corp 249-255 Huron St Brooklyn 22 NY (3)
Dynamatic Div Eaton Mfg Co 3122 14th Ave Kenosha Wis (10)
Ederer Engineering Co 2943 1st Ave S Seattle 4 Wash (10)
Edwards Co Inc Norwalk Conn (5)
Electran Mfg Co 1901 Clybourn Ave Chicago 14 Ill (6)
Electric Regulator Corp Norwalk Conn (2-9)
Electrical Windings Inc 2015 N Kolmar Ave Chicago 39 Ill (6)
Electro Engineering Works 401 Preda St San Leandro Calif (6)
Electronics Corp of America One Memorial Dr Cambridge Mass (3)
Faraday Inc 2011 W Beecher Rd Adrian Mich (5)
Federal Sign & Signal Corp 13626 S Western Ave Blue Island Ill (5)
Fischer & Porter Co 335 Warminster Rd Hatboro Pa (11)
Fulton Sylphon Div Robertshaw-Fulton Controls Co Box 400 Knoxville 1 Tenn (11)
Gemco Electric Co 25685 W Eight Mile Rd Detroit 40 Mich (4-6-7)
General Controls Co 801 Allen Ave Glendale Calif (8-11)
General Electric Co Apparatus Sales Schenectady 5 NY (1 thru 4—6 thru 10)
General Hardware Mfg Co Inc 80 White St New York 13 NY (14)
Guardian Electric Mfg Co 1550 W Carroll Ave Chicago 7 Ill (8-11)
Hankscraft Co Control Div Reedsburg Wis (15)
Harder (Donald C) Co 2580 K St San Diego 2 Calif (4)
Harnischfeger Corp 4400 W National Ave Milwaukee 46 Wis (10)
Hays Mfg Co Automatic Controls Div 12th and Liberty Sts Erie 6 Pa (3-8-11)
Hevi Duty Electric Co 3002 W Burleigh St (P O Box 563) Milwaukee 1 Wis (6)
Hewson Co Inc 115 Maple St Summit NJ (9)
IMC Magnetics Corp 570 Main St Westbury NY (7)
I-T-E Circuit Breaker Co Greensburg Div P O Box 98 Greensburg Pa (3)
International Business Machines Corp Times Equipment Div 590 Madison Ave New York 22 NY (5-12)
●INTERNATIONAL REGISTER CO 2620 W Washington Blvd Chicago 12 Ill (5)—ADV PG 99
Laurence (R G) Co Inc 122 Summit St Tenafly NJ (8-11)
Leach Corp 18435 Susana Rd Compton Calif (4-9)
Ledex Inc 123 Webster St Dayton 2 Ohio (8-19-20)
Leeds & Northrup Co 4970 Stenton Ave Phila 44 Pa (2-6)
Lindberg Engineering Co 2450 W Hubbard St Chicago 12 Ill (6)
Lumen Inc Moen Ave (P O Box 905) Joliet Ill (4)
Magnatrol Valve Corp 67 Fifth Ave Hawthorne NJ (11)
Magnetics Inc Box 391 Butler Pa (4-6-9)
Manning Maxwell & Moore Inc 250 E Main St Stratford Conn (11)
Max-A-Loc Inc El Monte Calif (3)
Mercoid Corp 4201 W Belmont Ave Chicago 41 Ill (11)
Minneapolis-Honeywell Regulator Co 2753 Fourth Ave S Minneapolis 8 Minn (5)
Minneapolis-Honeywell Regulator Co Industrial Div Wayne & Windrim Aves Phila 44 Pa (2-7-11-13-17-18)
National Acme Co Electrical Controls Div 170 E 131 St Cleveland 8 Ohio (8)
National Time & Signal Corp 21800 Wyoming Ave Detroit 37 Mich (5)
Naybor (E V) Laboratories Inc 26 Manorhaven Blvd Port Washington NY (8)
Notheifer Winding Labs Inc 220 Ewingville Rd (P O Box 455) Trenton 3 NJ (6)
Oviatt (D C) Co 2174 Lakeside Ave Cleveland 14 Ohio (13)
Panellit Div ISI Inc 7401 N Hamlin Ave Skokie Ill (17)
Permanent Magnet Co Inc 4437 Bragdon St Lawrence 26 Ind (14)
Phillips Mfg Co Inc 8200 Grand Ave Minneapolis 20 Minn (8)
Protection Controls Inc 6000 N Legett Ave Chicago 46 Ill (13)
R & IE Equipment Div I-T-E Circuit Breaker Co Greensburg Pa (3)
Raytheon Mfg Co Commercial Apparatus & Systems Div 100 River St Waltham 54 Mass (4)
Refrigerating Specialties Co 3004 W Lexington St Chicago 12 Ill (11)
●RELIANCE ELECTRIC & ENGINEERING CO 24701 Euclid Ave Cleveland 17 Ohio (4-7)—ADV PG 128
Reuland Electric Co 3001 W Mission Rd Alhambra Calif (10)
Richardson-Allen Corp 116-15 Fifteenth Ave College Point LI NY (6)
Ross Operating Valve Co 120 E Golden Gate Ave Detroit 3 Mich (11)
Ruggles-Klingemann Mfg Co Foster Court Salem Mass (11)
Russell & Stoll Co Inc 125 Barclay St NY 7 NY (3)
Safety Electrical Equipment Corp 1187 Dixwell Ave New Haven Conn (10)
Shrader (FW) Co 11623 S Broadway Los Angeles 61 Calif (14-16)
Siegler Corp Magnetic Amplifiers Div 632 Tinton Ave New York 55 NY (4-6-7-11)
Simplex Time Recorder Co 24 S Lincoln St Gardner Mass (5)
Skinner Precision Industries Inc Skinner Electric Valve Div 95 Edgewood Ave New Britain Conn (11)
●SORGEL ELECTRIC CO 838B W National Ave Milwaukee 4 Wis (6)—ADV PG 115
Square D Co Executive Plaza Park Ridge Ill (9)
Southwestern Industrial Electronics Co 10201 Westheimer (P O Box 22187) Houston 27 Tex (4-6)
Stackpole Carbon Co Stackpole St St Marys Pa (14)
Standard Electric Time Co 89 Logan St Springfield 2 Mass (5)
Stearns Electric Corp 120 N Broadway Milwaukee 2 Wis (10)
Stonite Coil Corp US Hwy 130 Yardville NJ (8)
Stromberg Div General Time Corp 135 S Main St Thomaston Conn (5)
Superior Electric Co 83 Laurel St Bristol Conn (4)
Superior Interlock Corp 73-39 Central Ave Glendale 27 NY (3)
Supreme Electric Products Co 194 Vassar St Rochester 7 NY (11)
Taylor-Winfield Corp 1052 Mahoning Ave NW Warren Ohio (11)
Trio Laboratories Inc Expressway Industrial Park Plainview NY (3)
Trombetta Solenoid Corp 329 N Milwaukee St Milwaukee 2 Wis (8)
Turbo Machine Co Lansdale Pa (13)
United States Electronics Corp 275 Warren St Lyndhurst NJ (8)
United Transformer Co 150 Varick St New York 13 NY (6)
Versabar Corp 14 Whyte St Jersey City NJ (10)
Vickers Inc Electric Products Div 1847 Locust St St Louis 3 Mo (4-10)
Viking Instruments Inc East Haddam Conn (11)
Weltronic Co 19500 W Eight Mile Rd Detroit 41 Mich (2-3)
Werner Electric Brake & Clutch Co Beloit Wisc (10)
Westinghouse Electric Corp P O Box 2278 Pittsburgh 30 Pa (1 thru 4—6 thru 14-16-17)
White-Rodgers Co 9797 Reavis Rd St Louis 23 Mo (11)
Wisconsin Electrical Mfg Co Inc 1237 S Third St Milwaukee 4 Wis (13)
●ZENITH ELECTRIC CO 155 W Walton St Chicago 10 Ill (5)—ADV PG 114

3L. LOW-VOLTAGE CONTROL SYSTEMS

Low-voltage relays, switches and power sources for control of lighting and appliance loads from multiple locations.

Amprobe Instrument Corp 630 Merrick Rd Lynbrook NY
Bryant Electric Co 1421 State St (Box D Barnum Sta) Bridgeport 2 Conn
General Electric Co Wiring Device Dept 95 Hathaway St Providence RI
Sierra Electric Corp 15100 S Figueroa St (P O Box 85) Gardena Calif
Touch-Plate Mfg Corp Box 1970 Long Beach Calif

3M. MOTOR CONTROLS

1. **Disconnect switches**
2. **Drum switches & controllers**
3. **Magnetic contactors**
4. **Magnetic starters**
5. **Manual starters**
6. **Pushbutton stations**
7. **Speed regulators & controls**
8. **Motor control centers**
9. **Starters, explosion-proof**
10. **Pushbutton stations, oiltight**

Starting, stopping and control equipment for motor circuits.

Acme Electric Corp 45 Water St Cuba NY (7)
Adam (Frank) Electric Co 3647 Windsor Pl St Louis Mo (1)
Allen-Bradley Co 136 W Greenfield Ave Milwaukee 4 Wis (1 thru 7)
●ALLIS-CHALMERS MFG CO 930 S 70th St Milwaukee 1 Wis (2-3-4-5-6-7)—ADV PG 74-75
American Electric Switch Div Clark Controller Co 1146 E 152 St Cleveland 10 Ohio (1)
American Rectifier Corp 95 Lafayette St NY 13 NY (7)
Arrow-Hart & Hegeman Electric Co 103 Hawthorn St Hartford 6 Conn (1-2-3-4-5-6)
Automatic Control Cp 995 University Ave St Paul 4 Minn (8)
●AUTOMATIC SWITCH CO 50-56 Hanover Rd Florham Pk NJ (3)—ADV PG 71
Automatic Timing & Controls Inc King of Prussia Pa (8)
B/W Controller Corp 2200 E Maple Rd Birmingham Mich (3-4)
Bogue Electric Mfg Co 52 Iowa Ave Paterson 3 NJ (7)
Bryant Electric Co 1421 State St (Box D Barnum Sta) Bridgeport 2 Conn (5)
Clark Controller Co 1146 E 152 St Cleveland 10 Ohio (2-3-4-5-6-7)
Continental Electric Equipment Co Box 1055 Cincinnati 1 Ohio (8)
Crouse-Hinds Co Syracuse 1 NY (3-4-5-6)
Curtis Development & Mfg Co 3244 N 33 St Milwaukee 16 Wis (7)
Cutler-Hammer Inc 228 N 12th St Milwaukee 1 Wis (1-2-3-4-5-6-7-8)
Delco Products Div General Motors Corp 329 E 1st St Dayton 1 Ohio (4)
Delta-Star Electric Div H K Porter Co Inc 2437 Fulton St Chicago 12 Ill (1)
Electric Distribution Products Inc 2200 31st St SW Allentown Pa (8)
Electric Machinery Mfg Co 800 Central Ave Minneapolis 13 Minn (4-7)
Electric Regulator Corp Norwalk Conn (7)
Eliza Metal Products Co Box 408 Bridgeville Pa (6)
Empire Switchboard Co Inc 810 Fourth Ave Brooklyn 32 NY (8)
Euclid Electric & Mfg Co 50 Edwards St Madison Ohio (2-3-4-6)
●FEDERAL PACIFIC ELECTRIC CO 50 Paris St Newark 5 NJ (2-3-4-5-6)—ADV PG 105
●FURNAS ELECTRIC CO 1067 McKee St Batavia Ill (2-3-4-5-6)—ADV PG 92
Gemco Electric Co 25685 W Eight Mile Rd Detroit 40 Mich (4-6-7)
General Control Co 1200 Soldiers Field Rd Boston 34 Mass (6)
General Controls Co 801 Allen Ave Glendale Calif (3-4)
General Electric Co Apparatus Sales Schenectady 5 NY (1 thru 8)
General Electric Co Circuit Protective Devices Dept 41 Woodford Ave Plainville Conn (8)
General Electric Co Distribution Assemblies Dept 41 Woodford Ave Plainville Conn (1 thru 8)

●GENERAL ELECTRIC SUPPLY CO 1260 Boston Ave Bridgeport Conn (1 thru 8)—ADV PG 84-85
General Switch Co 45 Roebling St Brooklyn 11 NY (1)
●GRAYBAR ELECTRIC CO INC 420 Lexington Ave NY 17 NY (1 thru 7)—ADV PG 2
Grayhill Inc 551 Hillgrove Ave La Grange Ill (6)
I-T-E Circuit Breaker Co 1900 Hamilton St Philadelphia 30 Pa (1)
I-T-E Circuit Breaker Co BullDog Electric Products Div 7610 Jos Campau Detroit Mich (1)
I-T-E Circuit Breaker Co Greensburg Div P O Box 98 Greensburg Pa (1)
Ideal Electric and Mfg Co East First St Mansfield Ohio (2-4-5)
●KILLARK ELECTRIC MFG CO 3940 Easton Ave St Louis 13 Mo (1-3-4-5-6)—ADV PG 78-79
Kirkwood Commutator Corp 4855 W 130 St Cleveland 35 Ohio (5)
Kolton Electric Mfg Co 123 New Jersey Railroad Ave Newark 5 NJ (1)
Leonard Electric Mfg Co 3907 Perkins Ave Cleveland 14 Ohio (8)
Lindell Electric Control Corp 384 Canal St New York 13 NY (2)
Link-Belt Co 1700 Prudential Plaza Chicago 1 Ill (7)
Lumenite Electronic Corp 407 S Dearborn St Chicago 5 Ill (3)
Machinery Electrification Inc 56 Hudson St Northboro Mass (7)
Metropolitan Electric Mfg Co 2250 Steinway St Long Island City 5 NY (1)
Minneapolis-Honeywell Regulator Co 2753 Fourth Ave S Minneapolis 8 Minn (6)
Monitor Controller Div Atlee Corp 99 Grove St Rockland Mass (1-3-4-5-6)
Murray Mfg Corp 1250 Atlantic Ave Brooklyn 16 NY (1)
National Acme Co Electrical Controls Div 170 E 131st St Cleveland 8 Ohio (5-6)
Nelson Electric Mfg Co P O Box 5385 Tulsa Okla (3-4-6-8)
Opad Electric Co 43 Walker St New York 13 NY (7)
Palmer Electric & Mfg Co 24 Water St Wakefield Mass (1)
Pyle-National Co 1344 N Kostner Ave Chicago 51 Ill (1-4-6-9)
Queen Products Co Inc Thirteenth & Rowan Sts Louisville 3 Ky (10)
R-B-M Controls Div Essex Wire Corp 131 Godfrey St Logansport Ind (3-4)
Rees (Machworth G) Inc 1573 E Forest Ave Detroit 7 Mich (6)
Reliance Electric & Engineering Co 24701 Euclid Ave Cleveland 17 Ohio (7)
Richards-Wilcox Mfg Co 150 Third St Aurora Ill (6)
Russell & Stoll Co Inc 125 Barclay St NY 7 NY (1-4-5-6)
Servospeed Div Electro Devices Inc 4 Godwin Ave Paterson NJ (7)
Siegler Corp Magnetic Amplifiers Div 632 Tinton Ave New York 55 NY (7)
Square D Co Executive Plaza Park Ridge Ill (1 thru 7)
Square D Co Electric Controller & Mfg Div 4493 Lee Rd Cleveland 28 Ohio (3-4)
Struthers-Dunn Inc Pitman NJ (4)
Superior Electric Co 83 Laurel St Bristol Conn (7)
System Analyzer Corp 700 W State St Nokomis Ill (3)
U S Electrical Motors Inc 200 E Slauson Ave Los Angeles 54 Calif (7)
Vickers Inc Tulsa Products Div 731 E First St Tulsa 20 Okla (7)
Wac Line Inc 35 S St Clair St Dayton 2 Ohio (7)
Wadsworth Electric Mfg Co Inc 20-34 W 11th St (Box 272) Covington Ky (1)
Ward Leonard Electric Co 28 South St Mount Vernon NY (3-4-6-7)
Weltronic Co 19500 W Eight Mile Rd Detroit 41 Mich (7)
Westinghouse Electric Corp P O Box 2278 Pittsburgh 30 Pa (8)
●WESTINGHOUSE ELECTRIC SUPPLY CO 3 Gateway Center (Box 448) Pittsburgh 30 Pa (1-2-3-4-5-6-7)—ADV PG 2nd Cover
Winterburn Mfg Co P O Box 386 Putnam Conn (7)
●ZENITH ELECTRIC CO 155 W Walton St Chicago 10 Ill (3-4)—ADV PG 114
Zinsco Electrical Products 729 Turner Los Angeles 12 Calif (8)

3N. RELAYS

1. **General purpose**
2. **Protective**
3. **Timing & time delay**
4. **Rotary**
5. **Motor-starting**
6. **Electronic**
7. **Miniature**

General purpose relays include magnetic and mechanically held types for remote switching of electrical circuits. Protective relays include overload, thermal, undervoltage, phase rotation, etc., relays.

Abrams Instrument Corp 606 E Shiawasee St Lansing Mich (3)
Acro Switch Div Robertshaw-Fulton Controls Co 2040 E Main St Columbus 16 Ohio (1)
Aemco Inc 10 State St Mankato Minn (1)
Airserco Mfg Co Inc 435 Melwood St Pittsburgh 13 Pa (1)
Aitken-Reed Inc 2802 Wollmer St Manitowac Wis (1-3)
Alcor Mfg Co 1140 S Seventh St De Kalb Ill (1)
Allen-Bradley Co 136 W Greenfield Ave Milwaukee 4 Wis (1-2-3)
Allis-Chalmers Mfg Co 930 S 70th St Milwaukee 1 Wis (1-2-3)
Amperite Co Inc 561 Broadway NY 12 NY (3)
Arrow-Hart & Hegeman Electric Co 103 Hawthorn St Hartford 6 Conn (1)
Autocall Co 58 Warden Ave Shelby Ohio (1)
Automatic Electric Co Northlake Ill (1-3)
●AUTOMATIC SWITCH CO 50-56 Hanover Rd Florham Pk NJ (1-2-3)—ADV PG 71
Automatic Timing & Controls Inc King of Prussia Pa (3)
B/W Controller Corp 2200 E Maple Rd Birmingham Mich (2-6)
Baker Perkins Inc Saginaw Mich (2)
Bristol Motor Div Vocaline Co of America Inc Coulter St Old Saybrook Conn (3)
Clare (C P) & Co 3101 Pratt Blvd Chicago 45 Ill (1)
Clark Controller Co 1146 E 152 St Cleveland 10 Ohio (1-2-3)
Comar Electric Co 3349 W Addison Chicago 18 Ill (1)
Cramer Controls Corp Main St Centerbrook Conn (3)
Cutler-Hammer Inc 228 N 12th St Milwaukee 1 Wis (1-2-3)
Daystrom Inc Weston Instruments Div 614 Frelinghuysen Ave Newark 12 NJ (1)
Ebert Electronics Corp 212-26 Jamaica Ave Queens Village 28 LI NY (1)
Elastic Stop Nut Corp of America Elizabeth Div 1027 Newark Ave Elizabeth NJ (3)
Elgin National Watch Co Electronics Div 2435 N Naomi St Burbank Calif (1-4)
Euclid Electric & Mfg Co 50 Edwards St Madison Ohio (1-3)
Farmer Electric Products Co Inc 2300 Washington St Newton Lower Falls 62 Mass (1)
Federal Pacific Electric Co 50 Paris St Newark 5 NJ (2)
General Controls Co 801 Allen Ave Glendale Calif (1)
General Electric Co Apparatus Sales Schenectady 5 NY (1-2-3)
Guardian Electric Mfg Co 1550 W Carroll Ave Chicago 7 Ill (1)
H-B Instrument Co American & Bristol Sts Philadelphia 40 Pa (1)
Haledy Electronics Co 57 William St NY 5 NY (1)
Hankscraft Co Control Div Reedsburg Wis (1)
Haydon (A W) Co 232 N Elm St Waterbury Conn (3)
Haydon (A W) Co 4060 Ince Blvd Culver City Calif (3)
Haydon Div General Time Corp 245 E Elm St Torrington Conn (3)
Heinemann Electric Co Pennsylvania Ave & Plum St Trenton 2 NJ (2-3)
Iron Fireman Mfg Co Electronics Div 2838 S E 9th Ave Portland 2 Ore (1)
Jordan Electronics 121 S Palm Ave Alhambra Calif (3)
Kurman Electric Co 191-193 Newel St Brooklyn 22 NY (1-2-3)
Leach Corp 18435 Susana Rd Compton Calif (1-2-3-4)
Lewus Electric Co 1254 W Harrison St Chicago 7 Ill (1)
Line Electric Co 229 River St Orange NJ (3)
Lumenite Electronic Corp 407 S Dearborn St Chicago 5 Ill (3)
Machinery Electrification Inc 56 Hudson St Northboro Mass (2-3)
Mercoid Corp 4201 W Belmont Ave Chicago 41 Ill (1)
Metals & Controls Inc 34 Forest St Attleboro Mass (5)
Minneapolis-Honeywell Regulator Co 2753 Fourth Ave S Minneapolis 8 Minn (1-3)
Naybor (E V) Laboratories Inc 26 Manorhaven Blvd Port Washington NY (1-3)
Nelson Electric Mfg Co P O Box 5385 Tulsa Okla (3)
Ohmite Mfg Co 3601 Howard St Skokie Ill (1-2)
Palmer Electric & Mfg Co 24 Water St Wakefield Mass (1)
Partrick & Wilkins Co 51 N Seventh St Phila 6 Pa (1)
Penn Controls Inc Goshen Ind (1)
Phillips Control Corp 59 W Washington St Joliet Ill (1)
Pollak (Joseph) Corp 81-95 Freeport St Boston 22 Mass (1)
Potter & Brumfield Div American Machine and Foundry Co Princeton Ind (1)
Price Electric Corp East Church & Second Sts Frederick Md (1)
R-B-M Controls Div Essex Wire Corp 131 Godfrey St Logansport Ind (1)
Rhodes (M H) Inc 30 Bartholomew Ave Hartford 6 Conn (3)
Square D Co Executive Plaza Park Ridge Ill (1-2-3)
Standard Electrical Products Co 2240 E Third St Dayton 3 Ohio (1-2-3)
Stradley Engineering Co P O Box 6006 Pittsburgh 11 Pa (2)
Struthers-Dunn Inc Pitman NJ (1-3)
Sylvania Electric Products Inc 730 Third Ave New York 19 NY (3)
Taitco Div Tait Mfg Co 500 Webster St Dayton 1 Ohio (1)
Terado Co 1068 Raymond Ave St Paul 14 Minn (7)
Touch-Plate Mfg Corp Box 1970 Long Beach Calif (1)
Ulanet (George) Co 413-15 Market St Newark 5 NJ (3)
Ward Leonard Electric Co 28 South St Mount Vernon NY (1)
Webster Electric Co 1900 Clark St Racine Wis (3)
Wesix Electric Heater Co 390 First St San Francisco 5 Calif (1)
Westinghouse Electric Corp Standard Control Div Beaver Pa (1-2-3)
●WESTINGHOUSE ELECTRIC SUPPLY CO 3 Gateway Center (Box 448) Pittsburgh 30 Pa (1-2-3)—ADV PG 2nd cover
Wheelock Signals Inc Branchport Ave Long Branch NJ (1)
White-Rodgers Co 9797 Reavis Rd St Louis 23 Mo (1)
Wilson (G C) & Co 1915 Eighth Ave Huntington W Va (3)
Zenith Electric Co 155 W Walton St Chicago 10 Ill (3)

3P. SYSTEM REGULATING EQUIPMENT

1. **Capacitors**
2. **Rheostats**
3. **Voltage regulators**
4. **Load resistors**
5. **Varistors**
6. **Thermistors**
7. **Arc suppressors**

Capacitors are for power factor control; resistances & rheostats are for control of voltage & current in circuits to motors, elevators, plating equipment, etc.; voltage regulators control voltage of transmission lines, feeders or specific utilization equipment. Varistors are voltage-sensitive resistors; thermistors are thermally sensitive resistors.

Acme Electric Corp 45 Water St Cuba NY (3)
Allen-Bradley Co 136 W Greenfield Ave Milwaukee 4 Wis (2)
Allis-Chalmers Mfg Co 930 S 70th St Milwaukee 1 Wis (3)
American Rectifier Corp 95 Lafayette St New York 13 NY (3)
Bogue Electric Mfg Co 52 Iowa Ave Paterson 3 NJ (3)
Bradley Semiconductor Corp 275 Walton St New Haven 11 Conn (7)
Central Transformer Co 900 W Jackson Blvd Chicago 7 Ill (3)
Columbia Electric Mfg Co 4519 Hamilton Ave Cleveland 14 Ohio (2)
Continental-Wirt Electronics Corp 26 W Queen Lane Philadelphia 44 Pa (2)
Djeco Div Djordjevic Engineering Co 1933 N Damen Ave Chicago 47 Ill (3)
Electronic Measurements Co Inc Lewis St & Maple Ave Eatontown NJ (3)
Exmet Corp 127 Marbledale Rd (P O Box 485) Tuckahoe NY (4)
●FEDERAL PACIFIC ELECTRIC CO 50 Paris St Newark 5 NJ (1)—ADV PG 105
General Electric Co Apparatus Sales Schenectady 5 NY (1-2-3-6)
Girard-Hopkins 1000 40th Ave Oakland 1 Calif (1)
Globar Plant (Refractories Div) Carborundum Co Niagara Falls NY (4-5-6)
Guyan Machinery Co Inc Box 150 Logan W Va (2-4)
Keystone Carbon Co Inc 1935 State St St Marys Pa (6)
Lake Shore Electric Corp 205 Willis St Bedford Ohio (3)
Line Material Industries McGraw-Edison Co 700 W Michigan St Milwaukee Wis (1-3)
Mallory (P R) & Co Inc 30 S Gray St Indianapolis 6 Ind (2)
National Electric Controller Co 7070 Glenwood Ave Chicago 26 Ill (2)
Ohio Brass Co 380 N Main St Mansfield Ohio (1)
Ohmite Mfg Co 3601 Howard St Skokie Ill (2)
Pennsylvania Transformer Div McGraw-Edison Co Box 330 Canonsburg Pa (3)
Railroad Accessories Corp Tenakill Park Cresskill NJ (2-4)
Raytheon Mfg Co Commercial Apparatus & Systems Div 100 River St Waltham 54 Mass (3)
Safety Electrical Equipment Corp 1187 Dixwell Ave New Haven Conn (3)
Sangamo Electric Co 11th & Converse Springfield Ill (1)
Shallcross Mfg Co Preston St Selma NC (4)
Simplex Co Inc 1139-41 N MacArthur Blvd Springfield Ill (3)
Sorensen & Co Inc Richards Ave South Norwalk Conn (3)
Sprague Electric Co North Adams Mass (1)
Stackpole Carbon Co Stackpole St St Marys Pa (4)

Superior Electric Co 83 Laurel St Bristol Conn (2-3)
Tobe Deutschmann Corp Providence Highway Norwood Mass (1)
Ward Leonard Electric Co 28 South St Mount Vernon NY (2-4)
Weltronic Co 19500 W Eight Mile Rd Detroit 41 Mich (3)
Westinghouse Electric Corp P O Box 2278 Pittsburgh 30 Pa (1-3)
●WESTINGHOUSE ELECTRIC SUPPLY CO 3 Gateway Center (Box 448) Pittsburgh 30 Pa (1-2-3)—ADV PG 2nd cover

TECHNICAL LITERATURE

To obtain the following literature, enter the appropriate Code Numbers* on the Free Information cards elsewhere in this issue.

*Code No.	Description, Pages Catalog No. & Mfr.
3-1	Electrical Switches; 10p (Alcor)
3-2	Time Controls; 50p; Cat. No. T-100 (Automatic Timing)
3-3	Photoelectric and Other Electronic Controls; 23p; Cat. No. 60 (Autotron)
3-4	Solenoid Air Valves; 12p; Cat. No. 601021 (Barksdale)
3-5	Standard Valves; 23p; Cat. No. 60-61 (Barksdale)
3-6	Relays; 41p; Cat. No. 61 (Comar)
3-7	Brakes & Clutches; 15p; Cat. No. GB-5 (Dynamatic)
3-8	Liquid Cooled Adjustable Speed Drive; 11p; Cat. No. DD-1 (Dynamatic)
3-9	Instrument and Control Switches; 12p; Cat. No. 6055-IN (Electro Switch)
3-10	Rotary Multipole Switches; 17p; Cat. No. 101-A (Electro Switch)
3-11	Electrical Control & Distribution Equipment; 29p (Empire)
3-12	Magnetic Starters; 15p; Cat. No. 1481 (Furnas)
3-13	Electric Drum Switches; 34p; Cat. No. 58-B1 (Furnas)
3-14	Distribution Switchboards; 32p; Cat. No. GEA-6627 (GE)
3-15	Buy Log of Low Voltage Distribution Equipment; 91p; Cat. No. GEC-1100C (GE)
3-16	Relays; 15p; Cat. No. 17-C (H-B Instrument)
3-17	Distribution Equipment; 36 p; Cat. No. 35M-5-60 (I-T-E)
3-18	Panelboards, Switchboards, and Unit Substations; 52p; Cat. No. 108 (Kinney)
3-19	Electrical Switches; 31 p; Cat. No. 110 (Licon)
3-20	Electrical Control Cabinets and Instrument Panels; 12p (Littleford)
3-21	Distribution Equipment; 170p (Metropolitan)
3-22	Toggle Switches and Toggle Switch Assemblies; 31p; Cat. No. 73f (MICRO)
3-23	Precision Switches; 28p; Cat. No. 101e (MICRO)
3-24	Basic Switches for Airborne Equipment; 31p; Cat. No. 78a (MICRO)
3-25	Enclosed Switches for Airborne Equipment; 15p; Cat. No. 77c (MICRO)
3-26	Lighted Display and Pushbutton Switch Devices; 19p; Cat. No. 67a (MICRO)
3-27	Small Basic Switches; 19p; Cat. No. 63a (MICRO)
3-28	Trip Control; 15p; Cat. No. 65c (MICRO)
3-29	Basic Switches for Industrial and Commercial Applications; 32p; Cat. No. 62c (MICRO)
3-30	Mercury Switches; 11p; Cat. No. 90b (MICRO)
3-31	Industrial Enclosed Switches; 19p; Cat. No. 83e (MICRO)
3-32	Heavy Duty Limit Switches; 19p; Cat. No. 84a (MICRO)
3-33	Handbook and Easy Guide to Designing Control Centers (Monitor)
3-34	Snap-Lock Limit Switch; 15p; Cat. No. EC-SL 260 (National Acme)
3-35	Pole Top Switches; 11p (Powerdyne)
3-36	Street Lighting Controls; 38p (Ripley)
3-27	Control Valves; 19p; Cat. No. S-9-60 (Ross)
3-38	Secondary Capacitors; 15p; Cat. No. i132 (Sangamo)
3-39	Electrical Metallic Tubing; 11p; Cat. No. RCP-9002 (Rome)
3-40	Solid State Servo Amplifiers; 12p; Cat. No. S 1169 (Siegler)
3-41	Substations & Power Centers; 12p; Cat. No. 960 (Sorgel)
3-42	Saturable Reactors; 4p; Cat. No. 615 (Sorgel)
3-43	Low Voltage Switching Systems; 16p (Touch-Plate)
3-44	Selenium Rectifiers; 47p; Cat. No. 3116-1a (Vickers)
3-45	Magnetic Amplifiers; 32p; Cat. No. 1105-1 (Vickers)
3-46	Distribution Equipment; 423p; Cat. No. 60 (Wadsworth)
3-47	Pushbutton Switches & Signal Lights; 72p; Cat. Sec. 1 (Rees)
3-48	Control Units; 20p; Cat. Sec. 2 (Rees)
3-49	Cylindrical Pushbutton Switches; 8p; Cat. Sec. 3 (Rees)
3-50	Limit Switches and Foot Switches; 44p; Cat. Sec. 4 (Rees)

SECTION 4. PROTECTIVE DEVICES

4A. FUSE CUTOUTS & LINKS

For high-voltage distribution lines.

Chance (A B) Co 210 North Allen St Centralia Mo
G & W Electric Specialty Co 3500 W 127 St Blue Island Ill
General Electric Co Apparatus Sales Schenectady 5 NY
Hubbard & Co 6301 Butler St Pittsburgh 1 Pa
Joslyn Mfg & Supply Co 3700 S Morgan St Chicago 9 Ill
Kearney (James R) Corp 4236 Clayton Ave St Louis 10 Mo
Line Material Industries McGraw-Edison Co 700 W Michigan St Milwaukee Wis
S & C Electric Co 4435 Ravenswood Ave Chicago 40 Ill
USCO Power Equipment Corp 829 N 36th Way Birmingham 4 Ala
Westinghouse Electric Corp P O Box 2278 Pittsburgh 30 Pa

4B. FUSES

1. Cartridge
2. Current-limiting
3. Glass tube
4. Open link
5. Plug
6. Time-delay

Cartridge, plug and open-link fuses are for feeder and branch circuit distribution overload protection; glass tube fuses protect individual devices or instruments; current-limiting fuses limit system short-circuit currents to safe values.

Bussmann Mfg Div McGraw-Edison Co University at Jefferson St Louis 7 Mo (1-2-3-4-5)
Cable Electric Products Inc 234 Doboll St Providence 7 RI (1-5)
Chase-Shawmut Co 374 Merrimac St Newburyport Mass (1-2-5)
Commercial Enclosed Fuse Co of NJ 6812 Polk St Guttenberg NJ (1-3-5)
Dependable-Electric Mfg Co Inc 537 Johnson Ave Brooklyn 37 NY (5)
Eagle Electric Mfg Co Inc 23-10 Bridge Plaza South Long Island City 1 NY (1-3-5)
Economy Fuse Div Federal Pacific Electric Co 2070 Maple St Des Plaines Ill (1-5)
Excel Fuse Co 117 W Erie St Pittsburgh 12 Pa (1)
●FEDERAL PACIFIC ELECTRIC CO 50 Paris St Newark 5 NJ (1-5)—ADV PG 105
Gem Electric Mfg Co Inc 237 37th St Brooklyn NY (2-5)
General Electric Co Apparatus Sales Schenectady 5 NY (1-2-4)
General Electric Co Wiring Device Dept 95 Hathaway St Providence RI (5)
●GENERAL ELECTRIC SUPPLY CO 1260 Boston Ave Ave Bridgeport Conn (1 thru 5)—ADV PG 84-85
●GRAYBAR ELECTRIC CO INC 420 Lexington Ave NY 17 NY (1-3-4-5)—ADV PG 2
Interlectric Div El-Tronics Inc 1401 Lexington Ave Warren Pa (1)
Littlefuse Inc 1865 Miner St Des Plaines Ill (3)
Miller Electric Co 120 Main St Pawtucket RI (1-5)
Monarch Electric Div El-Tronics Inc 118 E First St Jamestown NY (1-5-6)
Pierce Renewable Fuses Inc Box F Leicester NY (1-5)
Royal Electric Corp 95 Grand Ave Pawtucket RI (1-5)
●S & C Electric Co 4435 Ravenswood Ave Chicago 40 Ill (2)—ADV PG 128
Solar Electric Corp 121 Central Ave Warren Pa (1)
Star-A Electric Mfg Co Inc 269 Meserole St Brooklyn 6 NY (1-5)
Trico Fuse Mfg Co 2948 N 5th St Milwaukee 12 Wis (1)
Ware Fuse Corp 4400 W Lake St Chicago 24 Ill (1-5)
Westinghouse Electric Corp P O Box 2278 Pittsburgh 30 Pa (2)

4C. FUSE ACCESSORIES

1. Dummy plugs
2. Fuse clips
3. Fuse clip clamps
4. Fuse clip reducers
5. Fuse cutouts, blocks & holders
6. Fuse links
7. Fuse wire strip
8. Fuse adapter remover
9. Fuse clip cleaner

Supplementary equipment for low-voltage distribution fuses.

Atlee Corp 47 Prospect St Woburn Mass (2)
Bussman Mfg Div McGraw-Edison Co University at Jefferson St Louis 7 Mo (1 thru 7)
Cable Electric Products Inc 234 Doboll St Providence 7 RI (5)
Chase-Shawmut Co 374 Merrimac St Newburyport Mass (2-5-6-7)
Circle F Mfg Co 720 Monmouth St Trenton 4 NJ (5)
Commercial Enclosed Fuse Co of NJ 6812 Polk St Guttenberg NJ (2-3-4-6-7)
Connecticut Electric Mfg Co Main St Bantam Conn (5)

Dante Electric Mfg Co Bantam Conn (2)
Eagle Electric Mfg Co Inc 23-10 Bridge Plaza South Long Island City 1 NY (3-4-6)
Excel Fuse Co 117 W Erie St Pittsburgh 12 Pa (2-6)
General Electric Co Apparatus Sales Schenectady 5 NY (5-6)
General Electric Co Wiring Device Dept 95 Hathaway St Providence RI (5)
Hoffman Engineering Corp 1050 Tyler St Anoka Minn (5)
Holub Industries Inc 442 Elm St Sycamore Ill (3-4)
Ilsco Corp 4730 Madison Rd Cincinnati 27 Ohio (2)
Interlectric Div El-Tronics Inc 1401 Lexington Ave Warren Pa (3-6)
Knox Porcelain Corp 2706 Mynders Ave (P O Box 2031) Knoxville 1 Tenn (5)
Kolton Electric Mfg Co 123 New Jersey Railroad Ave Newark 5 NJ (2-4-5)
Kulka Electric Corp 633 S Fulton Ave Mount Vernon NY (2)
Martindale Electric Co 1383 Hird Ave Cleveland 7 Ohio (3-9)
Monarch Electric Div El-Tronics Inc 118 E First St Jamestown NY (2-6)
Multi Electric Mfg Inc 4223 W Lake St Chicago 24 Ill (2-5)
Pierce Renewable Fuses Inc Box F Leicester NY (6)
Royal Electric Corp 95 Grand Ave Pawtucket RI (4)
Specialties Inc 2936 Sacramento St Pittsburgh 4 Pa (2)
Square D Co Executive Plaza Park Ridge Ill (2)
Star-A Electric Mfg Co Inc 269 Meserole St Brooklyn 6 NY (6)
Sylvania Electric Products Inc 730 Third Ave New York 19 NY (2)
Trico Fuse Mfg Co 2948 No 5th St Milwaukee 12 Wis (3-4)
Ware Fuse Corp 4400 W Lake St Chicago 24 Ill (6)

4D. CIRCUIT BREAKERS

1. **High voltage**
2. **600v and less**
3. **Explosion-proof**
4. **Vapor-proof**

For primary and secondary distribution feeder and branch circuit protection.

Adam (Frank) Electric Co 3647 Windsor Pl St Louis Mo (2)
Allis-Chalmers Mfg Co 930 S 70th St Milwaukee 1 Wis (1-2)
Appleton Electric Co 1701-59 Wellington Ave Chicago 13 Ill (2)
Crouse-Hinds Co Syracuse 1 NY (2)
●CUTLER-HAMMER INC 228 N 12th St Milwaukee 1 Wis (2)—ADV PG 80-81
Derrick Light & Equipment Co 1201 E Daggett (P O Box 414) Fort Worth Tex (2-4)
●FEDERAL PACIFIC ELECTRIC CO 50 Paris St Newark 5 NJ (1-2)—ADV PG 105
Gemco Electric Co 25685 W Eight Mile Rd Detroit 40 Mich (3)
General Electric Co Apparatus Sales Schenectady 5 NY (1-2-3)
General Electric Co Circuit Protective Devices Dept 41 Woodford Ave Plainville Conn (2)
●GENERAL ELECTRIC SUPPLY CO 1260 Boston Ave Bridgeport Conn (1-2-3-4)—ADV PG 84-85
Heinemann Electric Co Pennsylvania Ave & Plum St Trenton 2 NJ (2)
Hope Electrical Products Co Inc 27 Long Ave Hillside NJ (2)
I-T-E Circuit Breaker Co 1900 Hamilton St Philadelphia 30 Pa (4)
I-T-E Circuit Breaker Co BullDog Electric Products Div 7610 Jos Campau Detroit Mich (2)
Killark Electric Mfg Co 3940 Easton Ave St Louis 13 Mo (3-4)
Kolton Electric Mfg Co 123 New Jersey Railroad Ave Newark 5 NJ (2)
Lake Shore Electric Corp 205 Willis St Bedford Ohio (2)
Line Material Industries McGraw-Edison Co 700 W Michigan St Milwaukee Wis (1)
Mechanical Products Inc 1824 River St Jackson Mich (2)
Murray Mfg Corp 1250 Atlantic Ave Brooklyn 16 NY (2)
Nelson Electric Mfg Co P O Box 5385 Tulsa Okla (1-2-3)
Pyle-National Co 1344 N Kostner Ave Chicago 51 Ill (2-3)
Russell & Stoll Co Inc 125 Barclay St NY 7 NY (2-3)
Sangamo Electric Co 11th & Converse Springfield Ill (2)
Square D Co Executive Plaza Park Ridge Ill (1-2-3)
Wadsworth Electric Mfg Co Inc 20-34 W 11th St (Box 272) Covington Ky (2)
Westinghouse Electric Corp P O Box 2278 Pittsburgh 30 Pa (1-3)
Westinghouse Electric Corp Standard Control Div Beaver Pa (2)
●WESTINGHOUSE ELECTRIC SUPPLY CO 3 Gateway Center (Box 448) Pittsburgh 30 Pa (2-3)—ADV PG 2nd cover
Zinsco Electrical Products 729 Turner Los Angeles 12 Calif (2)

4E. SPECIAL PROTECTIVE EQUIPMENT

1. **Cathodic protective equipment**
2. **Current-limiting reactors**
3. **Lightning protective equipment**
4. **Motor thermal overload devices**
5. **Network protectors**
6. **Ground rods**
7. **Ballast thermal protectors**
8. **Motor single-phasing protection**
9. **Capacitor protective gaps**
10. **Fluorescent lamp circuit-breaker protectors**
11. **Surge protectors**

Allis-Chalmers Mfg Co 930 S 70th St Milwaukee 1 Wis (2-4)
Blackburn (Jasper) Corp 1525 Woodson Rd St Louis 14 Mo (6)
Bogue Electric Mfg Co 52 Iowa Ave Paterson 3 NJ (2)
Brach Mfg Corp 200 Central Ave Newark 3 NJ (3)
Cathodic Protection Service 4601 Stanford St Houston Tex (1)
Copperweld Steel Co Wire and Cable Div Glassport Pa (3-6)
Cutler-Hammer Inc 228 N 12th St Milwaukee 1 Wis (4)
Delta-Star Electric Div H K Porter Co Inc 2437 Fulton St Chicago 12 Ill (3)
Djeco Div Djordjevic Engineering Co 1933 N Damen Ave Chicago 47 Ill (1-2)
Engelhard Industries Inc Industrial Equipment Div Instruments & Systems Sec 850 Passaic Ave East Newark NJ (1)
General Cable Corp 730 Third Ave New York 17 NY (1)
General Electric Co Apparatus Sales Schenectady 5 NY (1 thru 5-9)
Goetz (J F) Mfg Co 162 South St Hartford Wis (3)
Good-All Electric Mfg Co 112 W First St Ogallala Neb (1)
Hubbard & Co 6301 Butler St Pittsburgh 1 Pa (3-6)
Independent Protection Co Inc 1605-07 S Main St Goshen Ind (3)
Joslyn Mfg & Supply Co 3700 S Morgan St Chicago 9 Ill (3)
Kearney (James R) Corp 4236 Clayton Ave St Louis 10 Mo (3)
Knopp Inc 1307 66th St Oakland 8 Calif (1)
Kortick Mfg Co 5600 Third St San Francisco 24 Calif (6)
Line Material Industries McGraw-Edison Co 700 W Michigan St Milwaukee Wis (3)
M & W Electric Mfg Co Inc S Walnut St (P O Box 87) East Palestine Ohio (6)
Mechanical Industries Production Co 217-223 Ash St Akron 8 Ohio (4)
Metals & Controls Inc 34 Forest St Attleboro Mass (4-7)
Murray Mfg Corp 1250 Atlantic Ave Brooklyn 16 NY (2)
Nelson Electric Mfg Co P O Box 5385 Tulsa Okla (1)
New Jersey Zinc Co 160 Front St New York 38 NY (1-6)
Ohio Brass Co 380 N Main St Mansfield Ohio (3)
Penn-Union Electric Corp 315 State St Erie Pa (6)
Porcelain Products Co 224 N Patterson St Carey Ohio (6)
Premax Products Div Chisholm-Ryder Co Inc College & Highland Aves Niagara Falls NY (6)
R T & E Corp 1900 E North St Waukesha Wis (3)
Railroad Accessories Corp Tenakill Park Cresskill NJ (3)
Rome Cable Div of Alcoa 421 Ridge St Rome NY (1)
Security Mfg & Contracting Co 606-612 Pine St Burlington Wis (3)
Stradley Engineering Co P O Box 6006 Pittsburgh 11 Pa (8)
Swedish Iron & Steel Corp 910 Westfield Ave Elizabeth NJ (10)
Vickers Inc Electric Products Div 1847 Locust St St Louis 3 Mo (11)
Wallace & Tiernan Inc 25 Main St Belleville NJ (1)
Weaver (J A) Co 2110 Howard St St Louis 6 Mo (6)
Westinghouse Electric Corp P O Box 2278 Pittsburgh 30 Pa (2-3-4-5-8-9)
●WESTINGHOUSE ELECTRIC SUPPLY CO 3 Gateway Center (Box 448) Pittsburgh 30 Pa (2-6)—ADV PG 2nd cover

TECHNICAL LITERATURE

To obtain the following literature, enter the appropriate Code Numbers* on the Free Information cards elsewhere in this issue.

*Code No.	Description, Pages Catalog No. & Mfr.
4-1	Fuses; 84p (Chase-Shawmut)
4-2	Fuses; 20p; Cat. No. 14 (Littelfuse)
4-3	Lightning Protection; 12p (Security)

SECTION 5. WIRING DEVICES AND BOXES

See index for panelboards and other equipment normally housed in cabinets.

Switches other than wiring device switches are listed in Sec. 3.

Hangers and supports for cable and conduit are listed in Sec. 6 & 7, respectively.

Lamp dimmers are listed in Sec. 3.

5A. WIRING DEVICE SWITCHES

1. **Canopy**
2. **Ceiling pull**
3. **Cord**
4. **Delayed action**
5. **Door-operated**
6. **Key-operated**
7. **Lever-operated pull**
8. **Lumiline cap**
9. **Mercury**
10. **Momentary contact**
11. **Oil burner**
12. **Pendant**
13. **Pushbutton**
14. **Rotary**
15. **Tumbler**
16. **Weatherproof**
17. **Toggle**
18. **Tap**
19. **Rocker type**
20. **Silent type**

Small switches used for general control of lighting and appliance loads in residences, offices, etc.

Alcor Mfg Co 1140 S Seventh St De Kalb Ill (1-5-10-13-14)

Amprobe Instrument Corp 630 Merrick Rd Lynbrook NY (10)
Arrow-Hart & Hegeman Electric Co 103 Hawthorne St Hartford 6 Conn (1-2-3-6-10-12-13-14-15-16)
Bryant Electric Co 1421 State St (Box D Barnum Sta) Bridgeport 2 Conn (1-2-3-5-8-9-10-12-13-14-15-16)
Cable Electric Products Inc 234 Daboll St Providence 7 RI (3-12-14-15-17)
●CIRCLE F MFG CO 720 Monmouth St Trenton 4 NJ (1-2-3-5-8-10-11-12-13-14-15-16)—ADV PG 91
Controls Co of America Control Switch Div 1420 Delmar Dr Folcroft Pa (13-17)
Cutler-Hammer Inc 228 N 12th St Milwaukee 1 Wis (1-5-6-7-10-11-12-13-14-16)
Eagle Electric Mfg Co Inc 23-10 Bridge Plaza South Long Island City 1 NY (1-2-5-12-15-16-20)
Edco International Corp 20722 W Seven Mile Rd Detroit 19 Mich (4)
Edwards Co Inc Norwalk Conn (13)
Furnas Electric Co 1067 McKee St Batavia Ill (13)
Gem Electric Mfg Co Inc 237 37th St Brooklyn NY (16)
General Electric Co Wiring Device Dept 95 Hathaway St Providence RI (1-3-5-8-9-11-13-14-15-16)
●GENERAL ELECTRIC SUPPLY CO 1260 Boston Ave Bridgeport Conn (1 thru 17)—ADV PG 84-85
H-B Instrument Co American & Bristol Sts Philadelphia 40 Pa (9)
Hart Mfg Co 164 Bartholomew Ave Hartford Conn (14-15)
●HUBBELL (HARVEY) INC State St & Bostwick Ave Bridgeport 2 Conn (2-3-5-6-8-9-11-12-13-14-15-16)—ADV PG 125
●KILLARK ELECTRIC MFG CO 3940 Easton Ave St Louis 13 Mo (7-10-12-13-15-16)—ADV PG 78-79
Kulka Electric Corp 633 S Fulton Ave Mount Vernon NY (1-3-10)
Leviton Mfg Co Inc 236 Greenpoint Ave Brooklyn 22 NY (1-2-3-8-9-10 thru 16-18)
Massey (A H) Inc 111 3rd St (P O Box 206) Derby Conn (15)
McGill Mfg Co Inc Valparaiso Ind (1-7-10-13-17-19)
MICRO SWITCH Div of Minneapolis-Honeywell Regulator Co Chicago & Spring Freeport Ill (12)
Minneapolis-Honeywell Regulator Co 2753 Fourth Ave S Minneapolis 8 Minn (11-13)
Pass & Seymour Inc Syracuse 9 NY (2-3-5-6-9-10-12-13-15-16)
Rodale Mfg Co Inc 6th & Minor Sts Emmaus Pa (9-13-15)
Royal Electric Corp 95 Grand Ave Pawtucket RI (1-16)
Russell & Stoll Co Inc 125 Barclay St NY 7 NY (15-16)
●SIERRA ELECTRIC CORP 15100 S Figueroa St (P O Box 65) Gardena Calif (6-9-13-15-17-20)—ADV PG 111
Slater Electric & Mfg Co Inc 45 Sea Cliff Ave Glen Cove NY (2-5-6-9-10-11-13-15-16)
Suttle Equipment Co 135 S LaSalle St Chicago 3 Ill (13)
Theiler (H J) Corp Ashmont Ave Whitinsville Mass (15)
Touch-Plate Mfg Corp Box 1970 Long Beach Calif (10)
Trine Mfg Corp 1430 Ferris Place New York 61 NY (5)
Wadsworth Electric Mfg Co Inc 20-34 W 11th St (Box 272) Covington Ky (5-16)
Winterburn Mfg Co P O Box 386 Putnam Conn (5)

5B. CORD CONNECTION DEVICES

1. **Caps, plugs, bases & taps, household type**
2. **Convenience outlets**
3. **Multi-outlet assemblies**
4. **Power cord-connection bodies, heavy duty**
5. **Range & dryer receptacles**
6. **Weatherproof outlets**
7. **Grounding adapters**
8. **TV antenna outlets**
9. **Combination TV-ac outlets**
10. **Fused plugs & taps**
11. **Explosion-proof plugs & receptacles**
12. **Locking-type plugs & receptacles**

Devices for extension of electrical circuits to equipment by means of portable cords.

Adam (Frank) Electric Co 3647 Windsor Pl St Louis Mo (2)
Aitken-Reed Inc 2802 Wollmer St Manitowac Wis (3)
Appleton Electric Co 1701-59 Wellington Ave Chicago 13 Ill (6)
Arrow-Hart & Hegeman Electric Co 103 Hawthorn St Hartford 6 Conn (1 thru 7)
B & M Electric Corp 168 7th St Brooklyn 15 NY (10)
Beckley Electric Co Inc 468-470 Grand Ave Brooklyn 38 NY (1-4)
●BELL ELECTRIC CO 5735 S Claremont Ave Chicago 36 Ill (2-4-5-6)—ADV PG 130-131
Black (M) Mfg Co 300-08-N Third St Phila 6 Pa (1)
Bryant Electric Co 1421 State St (Box D Barnum Sta) Bridgeport 2 Conn (1-2-3-4-5-6)
CBC Electronics Co Inc 2601 N Howard St Philadelphia 33 Pa (3)
Cable Electric Products Inc 234 Daboll St Providence 7 RI (1-2-3)
Cam-Lok Div Empire Products Inc 9213 Blue Ash Rd Cincinnati 42 Ohio (4-6-11)
Cannon Electric Co 3208 Humboldt St Los Angeles 31 Calif (4)
●CIRCLE F MFG CO 720 Monmouth St Trenton 4 NJ (1 thru 7)—ADV PG 91
Crouse-Hinds Co Syracuse 1 NY (1-2-3-4-6)
Delta-Star Electric Div H K Porter Co Inc 2437 Fulton St Chicago 12 Ill (4)
Derrick Light & Equipment Co 1201 E Daggett (P O Box 414) Fort Worth Tex (6)
Duro-Test Corp 2321 Hudson Blvd North Bergen NJ (1)
Eagle Electric Mfg Co Inc 23-10 Bridge Plaza South Long Island City 1 NY (1-2-4-5-6-7)
Ericson Mfg Co 1660 Hayden Ave Cleveland 12 Ohio (3-4)
Gem Electric Mfg Co Inc 237 37th St Brooklyn NY (1-2-3-4-5-6)
General Electric Co Wiring Device Dept 95 Hathaway St Providence RI (1-2-4-5-6-7)
Glade Mfg Co 1632 W 75 Pl Chicago 20 Ill (1)
●GRAYBAR ELECTRIC CO INC 420 Lexington Ave NY 17 NY (1 thru 6)—ADV PG 2
Hessel (W F) Co Inc 74 Beekman St NY 38 NY (3-4-6-10)
●HOFFMAN ENGINEERING CORP 1050 Tyler St Anoka Minn (3-6)—ADV PG 102-118
Hopax Electric Inc 547 Greenwich St NY 13 NY (1)
●HUBBELL (HARVEY) INC State St & Bostwick Ave Bridgeport 2 Conn (1 thru 6-12)—ADV PG 125
I-T-E Circuit Breaker Co BullDog Electric Products Div 7610 Jos Campau Detroit Mich (3)
Industrial Automation Corp 2415 W Montrose Ave Chicago Ill (6)
Jordan Industries Inc 3030 N W 75 St Miami 47 Fla (1)
Joy Mfg Co Electrical Products Div 1201 Macklin Ave St Louis 10 Mo (3-4-6)
●KILLARK ELECTRIC MFG CO 3940 Easton Ave St Louis 13 Mo (6)—ADV PG 78-79
Kondu Corp 1040 W 12 St Erie Pa (4)
Knox Porcelain Corp 2706 Mynders Ave (P O Box 2031) Knoxville 1 Tenn (1-2-4-5-6)
Kulka Electric Corp 633 S Fulton Ave Mount Vernon NY (1-2)
Leviton Mfg Co Inc 236 Greenpoint Ave Brooklyn 22 NY (1-2-4-5-6)
Massey (A H) Inc 111 3rd St (P O Box 206) Derby Conn (1-2-3-4)
McKinley (Ben P) Co 522 S Clinton St Chicago 7 Ill (2-4-5)
Midwest Electric Products Inc 1515 N Front St Mankato Minn (1-3-4-6)
Murray (D A) Co Inc 632 N Mill St Tipton Ind (1)
PLM Products Inc 3871 W 150 St Cleveland 11 Ohio (4)
Pass & Seymour Inc Syracuse 9 NY (1-2-4-5-6)
Perfect-Line Mfg Corp Old Country Rd & Railroad Ave P O Box 65 Hicksville LI NY (6)
Pyle-National Co 1344 N Kostner Ave Chicago 51 Ill (3-4-6)
Rab Electric Mfg Co Inc 605 E 132 St New York 54 NY (6)
Raico Mfg Co 123-141 N Albany Ave Chicago 12 Ill (4-13)
Rodale Mfg Co Inc 6th & Minor Sts Emmaus Pa (1-2-3-4-5-7)
Royal Electric Corp 95 Grand Ave Pawtucket RI (1 thru 7)
●SIERRA ELECTRIC CORP 15100 S Figueroa St (P O Box 85) Gardena Calif (2-3-5-6)—ADV PG 111
Slater Electric & Mfg Co Inc 45 Sea Cliff Ave Glen Cove NY (2-4-5-6)
Sta-Tite Mfg Co 2000 Wyandotte Kansas City 8 Mo (1)
Standard Electric Time Co 89 Logan St Springfield 2 Mass (3)
Star-A Electric Mfg Co Inc 269 Messerole St Brooklyn 6 NY (1-2-4-5-6)
Stemco Mfg Co Box 9024 Stockyards Sta Denver 16 Colo (8)
Stonco Electric Products Co 333 Monroe Ave Kenilworth NJ (2-4-6)
Superior Electric Co 83 Laurel St Bristol Conn (4)
Tigerman Engineering Co 4332 N Western Ave Chicago 18 Ill (6)
Urell Inc Bradford Pa (1)
Wilkoff (M J) Co 823 Locust Pittsburgh 19 Pa (5)
●WIREMOLD CO Hartford 10 Conn (3)—ADV PG 4
Woodhead (Daniel) Co 15 N Jefferson St Chicago 6 Ill (1-3-4-12)

5C. LAMP ACCESSORIES

1. **Ballasts**
2. **Bayonet sockets**
3. **Bipost sockets**
4. **DC fluorescent resistors**
5. **Fluorescent lamp capacitors**
6. **Fluorescent lamp holders**
7. **Fluorescent thermal starters & sockets**
8. **Locks & guards**
9. **Lumiline lamp holders**
10. **Screw sockets**
11. **Socket adapters & reducers**
12. **Quartz lamp holders**
13. **Weatherproof sockets**

Adjustable Fixture Co 104 E Mason St Milwaukee 2 Wis (10)
Advance Transformer Co 2950 N Western Ave Chicago 18 Ill (1)
Apollo Lighting Fixture Co Inc 162 W Third St Mt Vernon NY (2)
Arrow-Hart & Hegeman Electric Co 103 Hawthorn St Hartford 6 Conn (6-7-8-9-10-11)
Benjamin Div Thomas Industries Inc 207 E Broadway Louisville 2 Ky (3-10-11)
Bryant Electric Co 1421 State St (Box D Barnum Sta) Bridgeport 2 Conn (3-6-7-8-10-11)
Cable Electric Products Inc 234 Daboll St Providence 7 RI (6-7)
Chadsey Corp P O Box 1858 Hartford 1 Conn (8)
●CIRCLE F MFG CO 720 Monmouth St Trenton 4 NJ (3-6-7-10-11)—ADV PG 91
Coil Co of America Inc 207-209 Washington St Northvale NJ (1)
Crouse-Hinds Co Syracuse 1 NY (10)
Day-Ray Products Inc 1133 Mission St South Pasadena Calif (1-6)
Derrick Light & Equipment Co 1201 E Daggett (P O Box 414) Fort Worth Tex (10)
Dialight Corp 60 Stewart Ave Brooklyn 37 NY (2-10)
Dolco Mfg Co 2350 Curray St Long Beach 5 Calif (13)
Drake Mfg Co 4626 N Olcott Harwood Heights Chicago 31 Ill (2-10)
Dura Electric Lamp Co Inc 62 E Bigelow St Newark 8 NJ (7)
Duro-Test Corp 2321 Hudson Blvd North Bergen NJ (1-6-7-11)
Eagle Electric Mfg Co Inc 23-10 Bridge Plaza South Long Island City 1 NY (2-6-8-10-11-13)
Earl Electric Mfg Corp 35-20 Borden Ave Long Island City NY (7)
Electric Cord Co 432 Plane St Newark 2 NJ (8)
Ericson Mfg Co 1660 Hayden Ave Cleveland 12 Ohio (8-10)
France Mfg Co 10325 Berea Rd Cleveland 2 Ohio (1)
Gem Electric Mfg Co Inc 237 37th St Brooklyn NY (10-11)
General Electric Co Apparatus Sales Schenectady 5 NY (1-5)
General Electric Co Wiring Device Dept 95 Hathaway St Providence RI (6-7-9-10-11)
●GENERAL ELECTRIC SUPPLY CO 1260 Boston Ave Bridgeport Conn (1 thru 13)—ADV PG 84-85
Gets-A-Lite Co 3865 N Milwaukee Ave Chicago 41 Ill (8)
Girard-Hopkins 1000 40th Ave Oakland 1 Calif (5)
●HUBBELL (HARVEY) INC State St & Bostwick Ave Bridgeport 2 Conn (6-7-10-11)—ADV PG 125
Jackson Electrical Co 900 W Van Buren St Chicago 7 Ill (10)
Jefferson Electric Co 25th & Madison Bellwood Ill (1)
Knox Porcelain Corp 2706 Mynders Ave (P O Box 2031) Knoxville 1 Tenn (10)
Kulka Electric Corp 633 S Fulton Ave Mount Vernon NY (1-2-6-7-10-11)
Laduby Co Inc Boston Post Rd (P O Box 88) Branford Conn (8)
Lectrohm Inc 5560 Northwest Highway Chicago 30 Ill (4)
Leviton Mfg Co Inc 236 Greenpoint Ave Brooklyn 22 NY (6-7-9-10-11)
Marco Industries 207 S Helena St Anaheim Calif (10)
Marvel Lamp Co 307 Newark St Hoboken NJ (7)
Massey (A H) Inc 111 3rd St (P O Box 206) Derby Conn (10)
McGill Mfg Co Inc Valparaiso Ind (8)
Miskella Infra-Red Co E 73rd & Grand Ave Cleveland 4 Ohio (12)
Morse (Frank W) Co 354 Congress St Boston 10 Mass (2-11)
New York Fluorescent Mfg Co Inc 162 Bowery New York 12 NY (7)
Pass & Seymour Inc Syracuse 9 NY (6-7-10-11)
Pattern Products Co Inc P O Box 135 Union NJ (8)
Pyle-National Co 1344 N Kostner Ave Chicago 51 Ill (10)
Radionic Transformer Co 411 S Sangamon St Chicago 7 Ill (1)
Raico Mfg Co 123-141 N Albany Ave Chicago 12 Ill (10)

Rite-O-Lite Co 308 E Washington Blvd Los Angeles Calif (8)
Robertson Transformer Co Thornton Road Blue Island Ill (1)
Rodale Mfg Co Inc 6th & Minor Sts Emmaus Pa (10-11)
Royal Electric Corp 95 Grand Ave Pawtucket RI (10-13)
Slater Electric & Mfg Co Inc 45 Sea Cliff Ave Glen Cove NY (10)
Sola Electric Div Basic Products Corp 1719 Busse Rd Elk Grove Ill (1)
Star-A Electric Mfg Co Inc 269 Meserole St Brooklyn 6 NY (6-7-10-11)
Stratfield Co 434 Grand St Bridgeport 4 Conn (1)
Suclar Laboratories Inc 1197 McCarter Highway Newark NJ (7)
Surelite Products Co 368 E 148 St New York 55 NY (7)
Swedish Iron & Steel Corp 910 Westfield Ave Elizabeth NJ (1-6)
Sylvania Electric Products Inc 730 Third Ave New York 19 NY (7)
Union Insulating Co Inc Box 351 Parkersburg W Va (10)
Universal Mfg Corp 29-51 E 6th St Paterson NJ (1)
Ward Leonard Electric Co 28 South St Mount Vernon NY (4)
Westinghouse Electric Corp P O Box 2278 Pittsburgh 30 Pa (10)
Westinghouse Electric Corp Lighting Div 1216 W 58th St (P O Drawer 5817) Cleveland 1 Ohio (1)
Woodhead (Daniel) Co 15 N Jefferson St Chicago 6 Ill (8-10)

5D. BOXES, WIRING

1. **Concrete, sidewalk & underground**
2. **Explosion-proof**
3. **Floor**
4. **Interior wall & ceiling**
5. **Non-metallic**
6. **Pole base**
7. **Submersible**
8. **Weatherproof**
9. **Vaporproof**

Boxes for installation of wiring devices, for splices and connectors, and for pulling conductors into raceways. For boxes enclosing equipment, see "Cabinets" in index.

Adalet Mfg Co 14300 Lorain Ave Cleveland 11 Ohio (1-2-6-8)
Adam (Frank) Electric Co 3647 Windsor Pl St Louis Mo (3-4)
Alhambra Foundry Co Ltd 1147 Meridian Ave Alhambra Calif (2)
●ALL-STEEL EQUIPMENT INC Aurora Ill (4) ADV PG 117
Allied Metal Stamping Co 1475 S 6th St Camden 4 NJ (1-4-5)
Allmetal Engineering Inc 1003 S Date Ave Alhambra Calif (4)
Alwalt Mfg Co Inc 1706 Lapham Dr (P O Box 1171) Modesto Calif (1-3-7-8)
Appleton Electric Co 1701-59 Wellington Ave Chicago 13 Ill (1-2-4-8)
●ARROLET CORP Foot of Bower St. Montgomery Pa (4-8)—ADV PG 127
●ARROW CONDUIT & FITTINGS CORP 108-20 180th St Jamaica 33 NY (1-4)—ADV PG 126
B & C Metal Stamping Co P O Box 2506 Atlanta Ga (3-4)
Barber Electric Mfg Co Inc 30 Chestnut St N Attleboro Mass (8)
●BELL ELECTRIC CO 5735 S Claremont Ave Chicago 36 Ill (8)—ADV PG 130-131
Bonnell Electric Mfg Co Inc 192-194 Chambers St New York 7 NY (2-3-7-8)
Bowers Mfg Co Inc 6700 Avalon Blvd Los Angeles 3 Calif (4)
Buckles (Chris) Inc 4830 S Hoyne Ave Chicago 9 Ill (4)
Burns (James F) Co 1601 Industrial Highway Pennsauken NJ (1-2-3-4-7-8)
Calvert Co 19851 Ingersoll Dr Rocky River 16 Ohio (4)
Columbia Metal Box Co 260 E 143 St NY 51 NY (4-8)
Crouse-Hinds Co Syracuse 1 NY (1 thru 8)
Derrick Light & Equipment Co 1201 E Daggett (P O Box 414) Fort Worth Tex (7-8-9)
Electrical Fittings Corp 37-50 57th St Woodside 77 NY (4)
Eliza Metal Products Co Box 408 Bridgeville Pa (4)
●FULLMAN MFG CO 1209-1215 Jefferson St Latrobe Pa (3-6)—ADV PG 120-126
G & W Electric Specialty Co 3500 W 127 St Blue Island Ill (1-2-7)
Gemco Electric Co 25685 W Eight Mile Rd Detroit 40 Mich (2-4-7-8)
General Metals Inc 858 Goldsbro Greensboro NC (8)
Gibbons Metal Products 730 Gibbons St Los Angeles 31 Calif (1-2-6-7-8)
●GRAYBAR ELECTRIC CO INC 420 Lexington Ave NY 17 NY (4-8)—ADV PG 2
●HOFFMAN ENGINEERING CORP 1050 Tyler St Anoka Minn (6-8)—ADV PG 102-118
●HOPE ELECTRICAL PRODUCTS CO INC 27 Long Ave Hillside NJ (1-2-6-7-8)—ADV PG 109
●HUENEFELD CO ENGINEERING PRODUCTS DIV 2701 Spring Grove Ave Cinninnati 25 Ohio (8)—ADV PG 113
Kees (F D) Mfg Co 700 Park Ave Beatrice Neb (8)
●KEYSTONE MFG CO 23328 Sherwood Rd Warren Mich (4-8)—ADV PG 123
●KILLARK ELECTRIC MFG CO 3940 Easton Ave St Louis 13 Mo (1-2-8)—ADV PG 78-79
Lew Electric Fittings Co 627 W Lake St Chicago 6 Ill (3)
Meco Metal Box & Panel Mfg Co Inc 2522 W Huntingdon St Phila 32 Pa (2-8)
Midwest Electric Products Inc 1515 N Front St Mankato Minn (4-8)
Moldcast Mfg Co 236 South St Newark 5 NJ (8)
●NATIONAL ELECTRIC DIV H K PORTER INC Porter Bldg Pittsburgh 19 Pa (1-3)—ADV PG 97-98
Nelson Electric Mfg Co P O Box 5385 Tulsa Okla (2-8)
Newart Mfg Co 6725 Machinery Ave Cleveland Ohio (4)
●O Z ELECTRICAL MFG CO INC 262 Bond St Brooklyn 17 N Y (2-7-8)—ADV PG 107
Palmer Electric & Mfg Co 24 Water St Wakefield Mass (7)
Parker Electrical Mfg Co 221 Washington St Oakland 7 Calif (4-8)
Perfect-Line Mfg Corp Old Country Rd & Railroad Ave P O Box 65 Hicksville LI NY (1-4-8)
Pyle-National Co 1344 N Kostner Ave Chicago 51 Ill (2-8)
Queen Products Co Inc Thirteenth & Rowan Sts Louisville 3 Ky (4-8)
Rab Electric Mfg Co Inc 605 E 132 St New York 54 NY (1-2-8)
Raco Mfg Co 123-141 N Albany Ave Chicago 12 Ill (2)
Richards (J R) Co P O Box 482 Carnegie Pa (1-3-4-5)
Rusgreen Mfg Co 14262 Birwood Ave Detroit 38 Mich (1-2-3-4-7-8)
Russell & Stoll Co Inc 125 Barclay St NY 7 NY (2-4-8)
●SPRING CITY ELECTRICAL MFG CO Spring City 85 Pa (1-2-3-4-6-7-8)—ADV PG 114-116
Steel City Electric Co 1207 Columbus Ave Pittsburgh 33 Pa (1-3-4)
Stonco Electric Products Co 333 Monroe Ave Kenilworth NJ (4-7-8)
Sun Electric Products Inc 28 S Day St Orange NJ (4)
Thepitt Mfg Co Gregg & Hammond Sts Carnegie Pa (4)
Union Insulating Co Inc Box 351 Parkersburg W Va (4-5)
V V Fittings Co P O Box 1253 Merchantville NJ (4)
Williams (H E) Products Co 106 S Main St Carthage Mo (4)
Woodhead (Daniel) Co 15 N Jefferson St Chicago 6 Ill (8)
Young Electric & Mfg Co Inc 2134 Curtis Denver 2 Colo (1-3-8)

5E. BOX HARDWARE

1. **Covers & Plates**
2. **Hickeys**
3. **Knockout blanks**
4. **Studs**
5. **Supports & hangers**
6. **Cable-to-box connectors**
7. **Weatherproof box covers & plates**
8. **Floor outlet nozzles**
9. **Explosion-proof unions**
10. **Lamp holders & spreaders**
11. **Reducing washers**

Accessories used with wiring boxes. See also "Fixture Hangers" and "Conduit Fittings" in index.

Adalet Mfg Co 14300 Lorain Ave Cleveland 11 Ohio (6)
●ALL-STEEL EQUIPMENT INC Aurora Ill (1-5) ADV PG 117
Allen-Stevens Conduit Fittings Corp 33-53 62nd St Woodside 77 NY (6)
Allied Industries Inc P O Box 119 Ogallala Neb (6)
Allied Metal Stamping Co 1475 S 6th St Camden 4 NJ (1)
Allmetal Engineering Inc 1003 S Date Ave Alhambra Calif (1-3)
Anderson Electric Corp P O Drawer 2151 Birmingham 1 Ala (6)
Appleton Electric Co 1701-59 Wellington Ave Chicago 13 Ill (1-2-3-5-6)
Arrolet Corp Foot of Bower St Montgomery Pa (1-3-5)
●ARROW CONDUIT & FITTINGS CORP 108-20 180th St Jamaica 33 NY (1-5)—ADV PG 128
Arrow-Hart & Hegeman Electric Co 103 Hawthorn St Hartford 6 Conn (1)
Badger Die Casting Corp 201 W Oklahoma Ave Milwaukee 7 Wis (6)
●BELL ELECTRIC CO 5735 S Claremont Ave Chicago 36 Ill (1-7)—ADV PG 130-131
Benjamin Div Thomas Industries Inc 207 E Broadway Louisville 2 Ky (1)
●BLACKHAWK INDUSTRIES 250 S Main St Dubuque Iowa (3-5)—ADV PG 88
Bowers Mfg Co Inc 6700 Avalon Blvd Los Angeles 3 Calif (1 thru 5)
Bridgeport Fittings Inc 209 Center St Bridgeport 2. Conn (2-4-6)
Bryant Electric Co 1421 State St (Box D Barnum Sta) Bridgeport 2 Conn (1)
Buchanan Electrical Products Corp .434 U S Route 22 Hillside NJ (3-6)
Burbank Electrical Products 215 W Palm Ave P O Box 7 Burbank Calif (5)
Burns (James F) Co 1601 Industrial Highway Pennsauken NJ (1-3-5)
Cable Electric Products Inc 234 Daboll St Providence 7 RI (1)
Circle F Mfg Co 720 Monmouth St Trenton 4 NJ (1)
Conduit Fittings Corp 6400 W 66th St Chicago 38 Ill (4-6)
Crouse-Hinds Co Syracuse 1 NY (1-3-5)
Delta-Star Electric Div H K Porter Co Inc 2437 Fulton St Chicago 12 Ill (6)
Dolco Mfg Co 2350 Curry St Long Beach 5 Calif (7-10)
Dossert Mfg Corp 249-255 Huron St Brooklyn 22 NY (6)
Duro Fittings Co 2210 S Davie Ave Los Angeles 22 Calif (4-6)
Eagle Electric Mfg Co Inc 23-10 Bridge Plaza South Long Island City 1 NY (1)
Earl Electric Mfg Corp 35-20 Borden Ave Long Island City NY (1)
Elliott Electric Mfg Corp 50-30 98th St Corona 68 NY (1-2-3-4-5-6)
Fullman Mfg Co 1209-1215 Jefferson St Latrobe Pa (1-5)
Gedney Electric Co Americas Bldg Radio City NY 20 NY (2-4-6)
General Electric Co Wiring Device Dept 95 Hathaway St Providence RI (1)
General Metals Inc 858 Goldsbro Greensboro NC (1-3-5)
Gibbons Metal Products 730 Gibbons St Los Angeles 31 Calif (1-3-4-5-7)
Green (R H) Inc 1201 24th St Oakland 7 Calif (3-11)
Halex Die Casting Co 8640 Bessemer Cleveland 27 Ohio (6)
Hall (William) Co Canal Bank Windsor Locks Conn (5)
Heyman Mfg Co Kenilworth 20 NJ (6)
●HUBBELL (HARVEY) INC State St & Bostwick Ave Bridgeport 2 Conn (1)—ADV PG 125
●HUENEFELD CO ENGINEERED PRODUCTS DIV 2701 Spring Grove Ave Cincinnati 25 Ohio (1) ADV PG 113
Ideal Industries Inc 5136 Park Ave Sycamore Ill (5)
Jordan Industries Inc 3030 N W 75 St Miami 47 Fla (1-9)
Kees (F D) Mfg Co 700 Park Ave Beatrice Neb (5)
●KEYSTONE MFG CO 23328 Sherwood Rd Warren Mich (1-5)—ADV PG 123
●KILLARK ELECTRIC MFG CO 3940 Easton Ave St Louis 13 Mo (6)—ADV PG 78-79
Knox Porcelain Corp 2706 Mynders Ave (P O Box 2031) Knoxville 1 Tenn (1)
Kruse-Rieke Auburn Ind (5)
Leviton Mfg Co Inc 236 Greenpoint Ave Brooklyn 22 NY (1)
Lew Electric Fittings Co 627 W Lake St Chicago 6 Ill (1-3)
Lint (Clyde W) 2323 W 18 St Chicago 8 Ill (3-5)
M & W Electric Mfg Co Inc S Walnut St (P O Box 87) East Palestine Ohio (6)
Madison Equipment Co 5405 Detroit Ave Cleveland 2 Ohio (1 thru 5)
Massey (A H) Inc 111 3rd St (P O Box 206) Derby Conn (1)
McKinley (Ben P) Co 522 S Clinton St Chicago 7 Ill (1-5)
Metalectrics Inc 627 Greenwich St New York 14 NY (2-4-6)
Metro Casting Co Inc 47 Grattan St Brooklyn 37 NY (6)
Midwest Electric Mfg Co 1639 Walnut St Chicago 12 Ill (2-3-4-6)
Newart Mfg Co 6725 Machinery Ave Cleveland Ohio (5)
●O Z ELECTRICAL MFG CO INC 262 Bond St Brooklyn 17 NY (6)—ADV PG 107
●PAINE CO 6 Westgate Rd Addison Ill (5)—ADV PG 94
Pass & Seymour Inc Syracuse 9 NY (1)
Perfect-Line Mfg Corp Old Country Rd & Railroad Ave P O Box 65 Hicksville NY (1)
Pucel Enterprises Inc 3746 Kelley Ave Cleveland 14 Ohio (1)
Pyle-National Co 1344 N Kostner Ave Chicago 51 Ill (6)

Queen Products Co Inc Thirteenth & Rowan Sts Louisville 3 Ky (1)
Rab Electric Mfg Co Inc 605 E 132 St New York 54 NY (3)
Ralco Mfg Co 123-141 N Albany Ave Chicago 12 Ill (9)
Rattan Mfg Co 10 Wall St (P O Box 1745) New Haven 7 Conn (2-4-6)
Red Seal Electric Co 10307 Detroit Ave Cleveland 2 Ohio (6)
Redi-Bolt Inc 5334 Indianapolis Blvd East Chicago Ind (4-5)
Reichert Float and Mfg Co 2242 Smead Ave Toledo 6 Ohio (3)
Richards (J R) Co P O Box 482 Carnegie Pa (1-3-4-5)
Rodale Mfg Co Inc 6th & Minor Sts Emmaus Pa (1)
Rusgreen Mfg Co 14262 Birwood Ave Detroit 38 Mich (6)
●SIERRA ELECTRIC CORP 15100 S Figueroa St (P O Box 85) Gardena Calif (1-7) ADV PG 111
Slater Electric & Mfg Co Inc 45 Sea Cliff Ave Glen Cove NY (1)
Spring City Electrical Mfg Co Spring City 85 Pa (1)
Star-A Electric Mfg Co Inc 269 Meserole St Brooklyn 6 NY (1)
●STEEL CITY ELECTRIC CO 1207 Columbus Ave Pittsburgh 33 Pa (1-2-3-4-5)—ADV PG 104
Steel Electric Products Co Inc 5602 18th Ave Brooklyn 4 NY (1 thru 5)
Stemco Mfg Co Box 9024 Stockyards Sta Denver 16 Colo (1-5)
Stonco Electric Products Co 333 Monroe Ave Kenilworth NJ (1-7)
Thepitt Mfg Co Gregg & Hammond Sts Carnegie Pa (6)
Thomas & Betts Co 36 Butler St Elizabeth 1 NJ (3-5-6)
Unimatic Corp Sherwood Lane Caldwell NJ (6)
Williams (H E) Products Co 106 S Main St Carthage Mo (1-5)
Yorkville Metal Products Co 627 Greenwich St New York 14 NY (2-4-6)

●KEYSTONE MFG CO 23328 Sherwood Rd Warren Mich (1 thru 5)—ADV PG 123
●KILLARK ELECTRIC MFG CO 3940 Easton Ave St Louis 13 Mo (3-4-5)—ADV PG 78-79
Kolton Electric Mfg Co 123 New Jersey Railroad Ave Newark 5 NJ (3-4-5)
Leonard Electric Mfg Co 3907 Perkins Ave Cleveland 14 Ohio (3-4-5)
Littleford Bros Inc 453 E Pearl St Cincinnati 2 Ohio (3)
Meco Metal Box & Panel Mfg Co Inc 2522 W Huntingdon St Phila 32 Pa (1-3-5)
Metropolitan Electric Mfg Co 2250 Steinway St Long Island City 5 NY (1 thru 6)
Midwest Electric Products Inc 1515 N Front St Mankato Minn (1-4)
Moldcast Mfg Co 236 South St Newark 5 NJ (6)
Mullenbach Div Electric Machinery Mfg Co 2100 E 27 St Los Angeles 58 Calif (3)
Murray Mfg Corp 1250 Atlantic Ave Brooklyn 16 NY (4-5)
Nelson Electric Mfg Co P O Box 5385 Tulsa Okla (3)
Northbrook Products Inc Industrial Div 624 S Michigan Ave Chicago 5 Ill (8)
Palmer Electric & Mfg Co 24 Water St Wakefield Mass (1 thru 5)
Parker Electrical Mfg Co 221 Washington St Oakland 7 Calif (1 thru 5)
Queen Products Co Inc Thirteenth & Rowan Sts Louisville 3 Ky (1-2-3-4-5)
Russell & Stoll Co Inc 125 Barclay St New York 7 NY (7)
●SPRING CITY ELECTRICAL MFG CO Spring City 85 Pa (1 thru 5-7)—ADV PG 114-116
Square D Co Executive Plaza Park Ridge Ill (1 thru 5)
Standard Electric Time Co 89 Logan St Springfield 2 Mass (3)
Sun Electric Products Inc 28 S Day St Orange NJ (1-3-5)
V V Fitting Co P O Box 1253 Merchantville NJ (1)
Wadsworth Electric Mfg Co Inc 20-34 W 11th St (Box 272) Covington Ky (1-3-4-5)
Young Electric & Mfg Co Inc 2134 Curtis Denver 2 Colo (1-2-3-4-5)

●STEEL CITY ELECTRIC CO 1207 Columbus Ave Pittsburgh 33 Pa (1)—ADV PG 104
Steel Electric Products Co Inc 5602 18th Ave Brooklyn 4 NY (1)
Thompson Electric Co P O Box 873 Cleveland 22 Ohio (2)
Tomic Sales & Engineering Co 20000 Sherwood Ave Detroit 34 Mich (1)
Unistrut Products Co 933 Washington Blvd Chicago 7 Ill (1)
Versabar Corp 14 Whyte St Jersey City NJ (1)
Wil-Son Mfg Co Cloverport Ky (1)
Woodhead (Daniel) Co 15 N Jefferson St Chicago 6 Ill (2)
Yorkville Metal Products Co 627 Greenwich St New York 14 NY (1)

5H. METER SOCKETS & MOUNTINGS

Sockets, troughs and accessories for kw-hr meters. See Sec. 5F for meter cabinets.

Anchor Mfg Co P O Box 959 Manchester NH
B & C Metal Stamping Co P O Box 2506 Atlanta Ga
Code Corp 222 Kalos St Philadelphia 28 Pa
General Electric Co Apparatus Sales Schenectady 5 NY
General Switch Co 45 Roebling St Brooklyn 11 NY
Kees (F D) Mfg Co 700 Park Ave Beatrice Neb
Murray Mfg Corp 1250 Atlantic Ave Brooklyn 16 NY
Palmer Electric & Mfg Co 24 Waters St Wakefield Mass
Square D Co Executive Plaza Park Ridge Ill
Westinghouse Electric Corp P O Box 2278 Pittsburgh 30 Pa

5F. CABINETS, HOUSINGS & ENCLOSURES

1. **Fuse & cutout**
2. **Meter**
3. **Panelboard**
4. **Switch & circuit breaker**
5. **Transformer**
6. **Weatherproof**
7. **Explosion-proof**
8. **Trolley wire protective enclosures**

Enclosures only; used for mounting and protection of equipment.

Adam (Frank) Electric Co 3647 Windsor Pl St Louis Mo (1-3-4)
Alwalt Mfg Co Inc 1706 Lapham Dr (P O Box 1171) Modesto Calif (1-2-3-5)
Appleton Electric Co 1701-59 Wellington Ave Chicago 13 Ill (7)
Atlas Metal Industries 259 W 23 St Hialeah Fla (3-5-6)
B & C Metal Stamping Co P O Box 2506 Atlanta Ga (6)
Barber Electric Mfg Co Inc 30 Chestnut St N Attleboro Mass (1-5)
Bonnell Electric Mfg Co Inc 192-194 Chambers St New York 7 NY (1-3-4-6-7)
Burns (James F) Co 1601 Industrial Highway Pennsauken NJ (1-2-3-4-5)
Cleveland Switchboard Co 2925 E 79 St Cleveland 4 Ohio (3)
Code Corp 222 Kalos St Philadelphia 28 Pa (2)
Columbia Metal Box Co 260 E 143 St NY 51 NY (1-3-5)
Continental Electric Equipment Co Box 1055 Cincinnati 1 Ohio (3-5)
Crouse-Hinds Co Syracuse 1 NY (1-3-4-7)
Cutler-Hammer Inc 228 N 12th St Milwaukee 1 Wis (1-2-3-4)
Derrick Light & Equipment Co 1201 E Daggett (P O Box 414) Fort Worth Tex (4-6)
Eliza Metal Products Co Box 408 Bridgeville Pa (3)
Empire Switchboard Co Inc 810 Fourth Ave Brooklyn 32 NY (3-4-6)
Falstrom Co 62 Falstrom Court Passaic NJ (2-3-4-5)
Gemco Electric Co 25685 W Eight Mile Rd Detroit 40 Mich (3-5)
General Metals Inc 858 Goldsbro Greensboro NC (1-2)
Gibbons Metal Products 730 Gibbons St Los Angeles 31 Calif (1-2-5-6-7)
●HOFFMAN ENGINEERING CORP 1050 Tyler St Anoka Minn (1 thru 6)—ADV PG 102-118
●HOPE ELECTRICAL PRODUCTS CO INC 27 Long Ave Hillside NJ (1-5)—ADV PG 109
●HUENEFELD CO ENGINEERED PRODUCTS DIV 2701 Spring Grove Ave Cincinnati 25 Ohio (1-3-4-5)—ADV PG 113
Kees (F D) Mfg Co 700 Park Ave Beatrice Neb (2-5)

5G. FIXTURE HANGERS & SUPPORTS

1. **Fixed**
2. **Disconnecting type**

Stems, channels, brackets and chain for permanent support of lighting fixtures. For poles and standards, see index.

Acme Lighting & Mfg Co 949 E 31 St Los Angeles 11 Calif (1)
Allen-Stevens Conduit Fittings Corp 33-53 62nd St Woodside 77 NY (1)
Benjamin Div Thomas Industries Inc 207 E Broadway Louisville 2 Ky (1)
Bowers Mfg Co Inc 6700 Avalon Blvd Los Angeles 3 Calif (1)
Crouse-Hinds Co Syracuse 1 NY (1)
Eagle Mfg Co 3508 Avalon Blvd Los Angeles 11 Calif (1)
Elliott Electric Mfg Corp 50-30 98th St Corona 68 NY (1)
Federal Shock Mount Corp 1060 Washington Ave New York 56 NY (1)
Gedney Electric Co Americas Bldg Radio City NY 20 NY (1)
Hubbard & Co 6301 Butler St Pittsburgh 1 Pa (1)
Ideal Industries Inc 5136 Park Ave Sycamore Ill (1)
Jackson Electrical Co 900 W Van Buren St Chicago 7 Ill (1)
Kees (F D) Mfg Co 700 Park Ave Beatrice Neb (1)
●KILLARK ELECTRIC MFG CO 3940 Easton Ave St Louis 13 Mo (1)—ADV PG 78-79
Lint (Clyde W) 2323 W 18 St Chicago 8 Ill (1)
Madison Equipment Co 5405 Detroit Ave Cleveland 2 Ohio (1)
Metalectrics Inc 627 Greenwich St New York 14 NY (1)
Mult-A-Frame Corp 6401 Epworth Blvd Detroit 10 Mich (1)
Multi Electric Mfg Inc 4223 W Lake St Chicago 24 Ill (1)
Myers Electric Products Inc 3019 S Vail Ave Los Angeles 22 Calif (2)
●PAINE CO 6 Westgate Rd Addison Ill (1)—ADV PG 94
●PFAFF & KENDALL 84 Foundry St Newark 5 NJ (2)—ADV PG 106
●POWER-STRUT DIV VAN HUFFEL PRODUCTS INC Dietz Rd Warren Ohio (1-2)—ADV PG 93
Pyle-National Co 1344 N Kostner Ave Chicago 51 Ill (1)
Quadrangle Mfg Co 32 S Peoria St Chicago 7 Ill (1)
Rodale Mfg Co Inc 6th & Minor Sts Emmaus Pa (1)

TECHNICAL LITERATURE

To obtain the following literature, enter the appropriate Code Numbers* on the Free Information cards elsewhere in this issue.

*Code No.	Description, Pages Catalog No. & Mfr.
5-1	Wiring Boxes; 14 p (Allied)
5-2	Electrical Fittings; 13p; Cat. No. 116 (Atlantic)
5-3	Metal Wall Plates; 30p; Cat. No. 31-D (Bell)
5-4	Weatherproof Wiring Devices; 16p (Bell)
5-5	Wiring Devices; 70p; Cat. No. 5A-82 (GE)
5-6	Pull Boxes & Gutters, 23p (Gibbons)
5-7	Heavy Duty Plugs and Receptacles: 50p; Cat. No. 40 (Hessel)
5-8	Specification Grade Wiring Devices; 8p (Hubbell)
5-9	Wireways, Fittings, Boxes, Cabinets and Enclosures; 27p; Cat. No. 160-A (Keystone)
5-10	Outlet Boxes and Switch Boxes; 12p; Cat. No. 159-C (Keystone)
5-11	Wiring Devices; 16p Cat. No. 1101 (Leviton)
5-12	Wiring Devices; 23p; Cat. No. W-58 (Perfect-Line)
5-13	Receptacles, Plugs and Connectors; 27p; Cat. No. 1252-II (Pyle-National)
5-14	Cabinets and Enclosures; 28p; Cat. No. C-29 (Queen Products)
5-15	Electrical Boxes and Fittings; 44p; Cat. No. 15 (Spring City)
5-16	Manual of Fluorescent Lamp Ballasts; 16p; Cat. No. M-1160 (Universal)
5-17	Catalog of Fluorescent Lamp Ballasts; 32p; Cat. No. LPC-1160 (Universal)

SECTION 6. CONDUCTORS AND CONNECTORS

Wire and cable are listed in 6A, 6B and 6C by code letter designations used in the National Electrical Code; Sections 6D and 6E list applications.

Wire and cable tools are listed in 12B; underground supports, poles, etc. in Sec. 1; raceways and enclosures in Sec. 7.

6A. BUILDING & POWER CABLE

1. **A, AA, AI, AIA—asbestos**
2. **AC, ACT, ACV—armored cable**
3. **ACL—armored cable, lead-covered**
4. **AVA, AVB, AVL—asbestos & varnished cambric**
5. **MI—mineral-insulated, metal-sheathed**
6. **NM, NMC—non-metallic sheathed**
7. **Paper, underground service**
8. **R—code rubber**
9. **RH, RHH—heat-resistant rubber**
10. **RH-RW, RHW—moisture & heat-resistant rubber**
11. **RW—moisture-resistant rubber**
12. **RU—latex rubber**
13. **RUH—heat-resistant latex rubber**
14. **RUW—moisture-resistant latex rubber**
15. **SB—slow-burning**
16. **SE, ASE, USE—service entrance**
17. **T—thermoplastic**
18. **TA—thermoplastic & asbestos**
19. **TW—moisture-resistant thermoplastic**
20. **UF—underground feeder & branch circuit**
21. **V—varnished cambric**
22. **WP—weatherproof**
23. **THW—heat-resistant thermoplastic**
24. **TBS—thermoplastic & fibrous braid**
25. **SA—silicone asbestos**
26. **SEU—service entrance, armored**
27. **Aluminum (ACSR), bare**
28. **Aluminum (ACSR), covered**

Accurate Insulated Wire Corp 25 Fox St New Haven 13 Conn (8-17-19)
Acorn Insulated Wire Co 36 Freeman St Pawtucket RI (1-2-4-6-8-9-10-11-16-17-18-19-20-21)
American Electric Cable Co 181 Appleton St Holyoke Mass (19)
American Flexible Conduit Co Inc 969 Shawmut Ave New Bedford Mass (2)
American Insulated Wire Corp 36 Freeman St Pawtucket RI (1-2-4-6-8-9-10-11-17-18-19-20-21-22)
American Metal Moulding Co 146 Coit St Irvington NJ (2-3-19)
●AMERICAN STEEL & WIRE DIV UNITED STATES STEEL CORP Rockefeller Bldg Cleveland 13 Ohio (1-3-7-8-9-10-11-15 thru 19-21-22)—ADV PG 72-73
Anaconda Wire & Cable Co 25 Broadway New York 4 NY (4-6-7-8-9-10-11-16-17-18-19-20-21-22)
Chester Cable Corp Oakland Ave Chester NY (2-3-6-17-20)
Circle Wire and Cable Corp 5500 Maspeth Ave Maspeth LI NY (2-3-6-8-9-10-11-16-17-19-20-21-22)
Clifton Conduit Co 3300 Eastbourne Ave Baltimore 24 Md (2)
Collyer Insulated Wire Co 249 Roosevelt Ave Pawtucket RI (1-4-6-9-10-16-18-19-20-21-23)
Columbia Cable & Electric Corp 255 Chestnut St Brooklyn 8 NY (2-3-6-17-19-20-26)
Continental Wire Corp P O Box 366 Wallingford Conn (1-4-17-18-19-20-21-23-24)
Copperweld Steel Co Wire and Cable Div Glassport Pa (22)
Cornish Wire Co Inc 50 Church St NY 7 NY (17)
●CRESCENT INSULATED WIRE & CABLE CO 319 N Olden Ave Trenton 5 NJ (2-3-6-8-9-10-11-16-17-19-20-21)—ADV PG 95
Diamond Wire & Cable Co 445 Park Ave Sycamore Ill (2-3-10-11-16-17-19-20-22-23-26)
Essex Wire Corp Wire & Cable Div 2601 S Adams Marion Ind (2-3-6-8-9-10-11-16-17-19-20-22-23)
●ETTCO WIRE & CABLE CORP 75 Onderdonk Ave Brooklyn 37 NY (2-6-16-17-19-20-23)—ADV PG 116
●GENERAL CABLE CORP 730 Third Ave New York 17 NY (1 thru 11—16 thru 22)—ADV PG 82-83
General Electric Co Wire & Cable Dept 1285 Boston Ave Bridgeport 2 Conn (1-2-3-4-6-9-10-11-16-18-19-20-21)
●GENERAL ELECTRIC SUPPLY CO 1260 Boston Ave Bridgeport Conn (1 thru 4-6-9-10-11-15-16-18-19-20-21-22)—ADV PG 84-85
●HATFIELD WIRE AND CABLE DIV CONTINENTAL COPPER & STEEL INDUSTRIES INC 487 Hillside Ave Hillside 5 NJ (2-6-9-10-11-16-19-20)—ADV PG 89
Kaiser Aluminum & Chemical Sales Inc Kaiser Center 300 Lakeside Dr Oakland 12 Calif (6-8 thru 14 16-17-19-20-22)
Kennecott Wire & Cable Div Okonite Co Phillipsdale (Rumford 16) RI (3-7-15-21-22)
Narragansett Wire Co 1125 Main St Pawtucket RI (6-9-16-19-20-22-23)
●NATIONAL ELECTRIC DIV H K PORTER CO INC Porter Bldg Pittsburgh 19 Pa (1-2-3-4-6-9-10-16-18-19-20-21)—ADV PG 97-98
Nelson Electric Mfg Co P O Box 5385 Tulsa Okla (5)
Normandy Electric Wire Corp 125 Second St Brooklyn 31 NY (2)
Okonite Co Passaic NJ (1-4-7-9-10-11-16-19-21-22)
Olin Conductors Metals Div P O Box 989 Chattanooga Tenn (27-28)
●PHELPS DODGE COPPER PRODUCTS CORP 300 Park Ave New York 22 NY (1-3-4-7 thru 11-15-17 thru 22)—ADV PG 76-77
Plastic Wire & Cable Corp E Main St Jewett City Conn (17-19-20-23)
Plastoid Corp 42-61 24th St LIC 1 NY (1-17-18-19-20)
Radix Wire Co 26260 Lakeland Blvd Cleveland 32 Ohio (1-2-4-6-17-18-19-20)
Reynolds Metals Co Richmond 18 Va (27-28)
Rhode Island Insulated Wire Co Inc 50 Burnham Ave Cranston RI (1-6-17-21)
Rockbestos Wire & Cable Co Nicoll and Canner Sts New Haven 4 Conn (1-2-4-18-21-25)
Roebling's (John A) Sons Corp 640 S Broad St Trenton 2 NJ (7-9-10-11-16-17-19-20-21-22)
●ROME CABLE DIV OF ALCOA 421 Ridge St Rome NY (6-9-10-16-19-20-22-23)—ADV PG 42
Royal Electric Corp 95 Grand Ave Pawtucket RI (1)
Simplex Wire & Cable Co 79 Sidney St Cambridge 39 Mass (2-4-6 thru 11-17-19-20-21)
Southwire Co Carrollton Ga (6-16-17-19-20-22-23)
●TRIANGLE CONDUIT & CABLE CO INC Triangle & Jersey Aves New Brunswick NJ (1-2-3-4-6-8 thru 11-16-17-19-20-21)—ADV PG 3rd cover
Victor Electric Wire & Cable Corp 618 Main St West Warwick RI (19)
Walker Brothers P O Box 33 Conshohocken Pa (6-9-10-11-16-19-20-22)
Western Insulated Wire Co 2425 E 30th St Los Angeles 58 Calif (1-2-3-4-6-9-10-11-16-21)

6B. FIXTURE WIRE

1. **AF—heat-resistant asbestos-covered**
2. **CF—heat-resistant cotton-covered**
3. **FF—rubber-covered flexible stranding**
4. **FFH—heat-resistant rubber-covered flexible stranding**
5. **RF—rubber-covered, solid or 7-strand**
6. **RFH—heat-resistant rubber-covered solid or 7-strand**
7. **SF—silicone rubber, solid or 7-strand**
8. **SFF—silicone rubber, flexible stranding**
9. **TF—thermoplastic-covered, solid or stranded**
10. **TFF—thermoplastic-covered, flexible stranding**

Accurate Insulated Wire Corp 25 Fox St New Haven 13 Conn (5-9-10)
Acorn Insulated Wire Co 36 Freeman St Pawtucket RI (1 thru 6-9-10)
American Electric Cable Co 181 Appleton St Holyoke Mass (9-10)
American Insulated Wire Corp 36 Freeman St Pawtucket RI (1 thru 6-9-10)
●AMERICAN STEEL & WIRE DIV UNITED STATES STEEL CORP Rockefeller Bldg Cleveland 13 Ohio (5-6-9-10)—ADV PG 72-73
Anaconda Wire & Cable Co 25 Broadway New York 4 NY (9-10)
Apex Wire & Cable Corp 237 37th St Brooklyn 32 NY (9-10)
Brand (William) American Enka Corp 31 Sudbury Rd Concord Mass (7-8-9-10)
Chester Cable Corp Oakland Ave Chester NY (9-10)
Circle Wire and Cable Corp 5500 Maspeth Ave Maspeth LI NY (2 thru 6-9-10)
Collyer Insulated Wire Co 249 Roosevelt Ave Pawtucket RI (1-3 thru 10)
Continental Wire Corp P O Box 366 Wallingford Conn (1-2-7-8-9-10)
Cornish Wire Co Inc 50 Church St NY 7 NY (3-9-10)
●CRESCENT INSULATED WIRE & CABLE CO 319 N Olden Ave Trenton 5 NJ (3-4-5-6-9-10)—ADV PG 95
Diamond Wire & Cable Co 445 Park Ave Sycamore Ill (1 thru 10)
Essex Wire Corp Wire & Cable Div 2601 S Adams Marion Ind (5-6-7-8-9-10)
●ETTCO WIRE & CABLE CORP 75 Onderdonk Ave Brooklyn 37 NY (9)—ADV PG 116
●GENERAL CABLE CORP 730 Third Ave New York 17 NY (1 thru 10)—ADV PG 82-83
General Electric Co Wire & Cable Dept 1285 Boston Ave Bridgeport 2 Conn (1-3-4-7-8-9-10)
●HATFIELD WIRE AND CABLE DIV CONTINENTAL COPPER & STEEL INDUS INC 487 Hillside Ave Hillside 5 NJ (6-9-10)—ADV PG 89
Lewis Engineering Co 52 Rubber Ave Naugatuck Conn (1)
Miller Electric Co 120 Main St Pawtucket RI (1-2-9-10)
●NATIONAL ELECTRIC DIV H K PORTER CO INC Porter Bldg Pittsburgh 19 Pa (1-5-6-7-8-9-10) ADV PG 97-98
Okonite Co Passaic NJ (1-3-4-5-6-8-9-10)
Phalo Plastics Corp 530 Boston Turnpike Shrewsbury Mass (9-10)
●PHELPS DODGE COPPER PRODUCTS CORP 300 Park Ave New York 22 NY (1-3-4-5-6-9-10) ADV PG 76-77
Plastic Wire & Cable Corp E Main St Jewett City Conn (9-10)
Plastoid Corp 42-61 24th St LIC 1 NY (9-10)
Radix Wire Co 26260 Lakeland Blvd Cleveland 32 Ohio (1-9-10)
Rockbestos Wire & Cable Co Nicoll and Canner Sts New Haven 4 Conn (1)
●ROME CABLE DV OF ALCOA 421 Ridge St Rome NY (1 thru 10)—ADV PG 42
Royal Electric Corp 95 Grand Ave Pawtucket RI (1-2-3-9-10)
Simplex Wire & Cable Co 79 Sidney St Cambridge 39 Mass (3 thru 10)
Southwire Co Carrollton Ga (9)
Surprenant Mfg Co 199 Washington St Boston 8 Mass (9-10)
●TRIANGLE CONDUIT & CABLE CO INC Triangle & Jersey Aves New Brunswick NJ (1 thru 10)—ADV PG 3rd cover
Victor Electric Wire & Cable Corp 618 Main St West Warwick RI (9-10)
Walker Brothers P O Box 33 Conshohocken Pa (9-10)
Western Insulated Wire Co 2425 E 30th St Los Angeles 58 Calif (1-4)

6C. FLEXIBLE CORD

1. **AFC, AFPD, AFPO—asbestos-covered, heat-resistant**
2. **AFS, AFSJ—rubber-jacketed, heat-resistant**
3. **AVPD, AVPO—heat- and moisture-resistant**
4. **C—lamp**
5. **CA—armored**
6. **CFC, CFPD, CFPO—cotton-covered, heat-resistant**

7. E, EO, ET—elevator cable
8. HC, HPD—heater
9. HPN—heater, oil, neoprene
10. HS—heater, jacketed
11. HSJ—heater, rubber-jacketed
12. K—heavy-duty, braided
13. P—reinforced
14. PD—twisted portable
15. PO—parallel
16. PW—reinforced, moistureproof
17. S, SO, ST—hard service
18. SJ, SJO, SJT—hard service, junior
19. SP—parallel, all rubber
20. SPT—parallel, all plastic
21. SR, SRT—range cable
22. SV, SVT—vacuum cleaner
23. TP, TPT, TS, TST—tinsel

Accurate Insulated Wire Corp 25 Fox St New Haven 13 Conn (2-4-7 thru 23)
Acorn Insulated Wire Co 36 Freeman St Pawtucket RI (1-3-4-6-8 thru 22)
Alpha Wire Corp 200 Varick St New York 14 NY (15-17-19-20-22)
American Insulated Wire Corp 36 Freeman St Pawtucket RI (1-2-4-6-8-9-10-11-13-14-15-17-18-19-20-22)
●AMERICAN STEEL & WIRE DIV UNITED STATES STEEL CORP Rockefeller Bldg Cleveland 13 Ohio—ADV PG 72-73
Anaconda Wire & Cable Co 25 Broadway New York 4 NY (12-17-18)
Apex Wire & Cable Corp 237 37th St Brooklyn 32 NY (8-15-20)
Belden Mfg Co P O Box 5070A Chicago 80 Ill (8-9-10-11-17-18-19-20-21-22-23)
Chester Cable Corp Oakland Ave Chester NY (17-18-20-22)
Circle Wire and Cable Corp 5500 Maspeth Ave Maspeth LI NY (4-5-12-13-14-17-18-19-20-21)
Collyer Insulated Wire Co 249 Roosevelt Ave Pawtucket RI (1-2-3-7-17-18-21-22)
Columbia Cable & Electric Corp 255 Chestnut St Brooklyn 8 NY (5)
Continental Wire Corp P O Box 366 Wallingford Conn (1-3-6)
Cornish Wire Co Inc 50 Church St NY 7 NY (4-8-9-11-15-17-18-20-22)
Crescent Co Inc 20 Central Ave Pawtucket RI (4-15-17-18-19-20-22)
●CRESCENT INSULATED WIRE & CABLE CO 319 N Olden Ave Trenton 5 NJ—ADV PG 95
Diamond Wire & Cable Co 445 Park Ave Sycamore Ill (4-5-6-8-10-14-15-17 thru 23)
Eagle Electric Mfg Co Inc 23-10 Bridge Plaza South Long Island City 1 NY (20)
Essex Wire Corp Wire & Cable Div 2601 S Adams Marion Ind (4-7-8-9-11-12-13-15-17-18-19-20-21-22)
●GENERAL CABLE CORP 730 Third Ave New York 17 NY (1 thru 22)—ADV PG 82-83
General Electric Co Wire & Cable Dept 1285 Boston Ave Bridgeport 2 Conn (1-2-3-8-9-15-17-18-19-20-21-22)
General Insulated Wire Works 69 Gordon Ave Providence 5 RI (8 thru 11-17 thru 23)
●HATFIELD WIRE AND CABLE DIV CONTINENTAL COPPER & STEEL INDUSTRIES INC 487 Hillside Ave Hillside 5 NJ (4-7 thru 23)—ADV PG 89
Kaiser Aluminum & Chemical Sales Inc Kaiser Center 300 Lakeside Dr Oakland 12 Calif (7-17-18-20-22)
Miller Electric Co 120 Main St Pawtucket RI (1-3-4-6-8-14-15-17-18-20-21-22-23)
●NATIONAL ELECTRIC DIV H K PORTER CO INC Porter Bldg Pittsburgh 19 Pa (1-2-18)—ADV PG 97-98
Normandy Electric Wire Corp 125 Second St Brooklyn 31 NY (17)
Okonite Co Passaic NJ (2-4-7-17 thru 21)
Phalo Plastics Corp 530 Boston Turnpike Shrewsbury Mass (18-20-21-22-23)
●PHELPS DODGE COPPER PRODUCTS CORP 300 Park Ave New York 22 NY (4-17-18-19-20-22)—ADV PG 76-77
Plastic Wire & Cable Corp E Main St Jewett City Conn (17-18-20-21-22-23)
Plastoid Corp 42-61 24th St LIC 1 NY (5-20)
Radix Wire Co 26260 Lakeland Blvd Cleveland 32 Ohio (1-20)
Rockbestos Wire & Cable Co Nicoll and Canner Sts New Haven 4 Conn (1-3)
Roebling's (John A) Sons Corp 640 S Broad St Trenton 2 NJ (7-17)
●ROME CABLE DIV OF ALCOA 421 Ridge St Rome NY (7-17 thru 22)—ADV PG 42
Royal Electric Corp 95 Grand Ave Pawtucket RI (1-4-6-8-9-10-11-13 thru 23)
Shallcross Controls Inc 2217-21 N 31 St Milwaukee 8 Wis (1)
Simplex Wire & Cable Co 79 Sidney St Cambridge 39 Mass (2-3-5-7-9-10-12-13-14-16 thru 21)
Star-A Electric Mfg Co Inc 269 Meserole St Brooklyn 6 NY (8-10-15-17-18-22)
Triangle Conduit & Cable Co Inc Triangle & Jersey Aves New Brunswick NJ (1-2-6-15-17-18-21-29-31-32)
Victor Electric Wire & Cable Corp 618 Main St West Warwick RI (20-22-23)
Walker Brothers P O Box 33 Conshohocken Pa (17-21)
Western Insulated Wire Co 2425 E 30th St Los Angeles 58 Calif (2-14-15-17-18-21-22)
Whitney Blake Co 102 Pershing St New Haven 14 Conn (4-9-11-17-18-19-20-22)

6D. SPECIFIC APPLICATIONS OF WIRE & CABLE

1. Airport
2. Appliance
3. Barn
4. Brewery
5. Bridge
6. Control
7. Electric furnace
8. Elevator
9. Gas tube sign
10. Ground
11. Heater
12. Lamp
13. Magnet
14. Marine
15. Parkway (Suburban)
16. Railway
17. Service drop
18. Service entrance
19. Signal & communications
20. Stage lighting
21. Submarine
22. Thermostat
23. Welding
24. Water-cooled leads
25. Lead wire
26. Electric fence
27. Trolley
28. Annunciator
29. Fixture
30. Bus drop
31. Series street lighting
32. Pump
33. Cathodic protection
34. Trailer
35. High voltage
36. Machine tool
37. Building
38. Portable power
39. High frequency (Litz)

Accurate Insulated Wire Corp 25 Fox St New Haven 13 Conn (1-2-6-8-11-12-15-19-20)
Acorn Insulated Wire Co 36 Freeman St Pawtucket RI (2-3-4-6-10-11-12-17-18-19-20)
Alpha Wire Corp 200 Varick St New York 14 NY (1-2-6-13-19-25)
Alphaduct Wire & Cable Co 25 Van Dyke Ave (P O Box 709) New Brunswick NJ (19)
American Electric Cable Co 181 Appleton St Holyoke Mass (2-6-9-12-19-20)
American Insulated Wire Corp 36 Freeman St Pawtucket RI (1-2-3-4-6-11-12-15-17-18-19-20)
●AMERICAN STEEL & WIRE DIV UNITED STATES STEEL CORP Rockefeller Bldg Cleveland 13 Ohio (1-2-6 thru 11-13 thru 21)—ADV PG 72-73
American Super-Temperature Wires Inc Winooski Vt (13)
Anaconda Wire & Cable Co 25 Broadway New York 4 NY (1 thru 21)
Ansonia Wire & Cable Co 111 Martin St Ashton RI (1-6-19)
Apex Wire & Cable Corp 237 37th St Brooklyn 32 NY (2-11-12)
Belden Mfg Co P O Box 5070A Chicago 80 Ill (2-9-11-12-13-14-19-23)
Brand (William) & Co Inc 51 North St Willimantic Conn (2-6-19)
Capitol Stage Lighting Co Inc 527 W 45 St New York 36 NY (20)
Chester Cable Corp Oakland Ave Chester NY (2-3-6-9-12-19-20)
Circle Wire and Cable Corp 5500 Maspeth Ave Maspeth LI NY (1-2-3-5-6-8-14-15-17-18-19-20)
Collyer Insulated Wire Co 249 Roosevelt Ave Pawtucket RI (2 thru 8-10-12-14 thru 20-23-38)
Columbia Wire & Supply Co 2850 Irving Park Rd Chicago 18 Ill (19)
Continental Wire Corp P O Box 366 Wallingford Conn (6-22)
Copperweld Steel Co Wire and Cable Div Glassport Pa (19)
Cornish Wire Co Inc 50 Church St NY 7 NY (2-19-20)
Crescent Co Inc 20 Central Ave Pawtucket RI (12-17)
●CRESCENT INSULATED WIRE & CABLE CO 319 N Olden Ave Trenton 5 NJ (4 thru 8-10-12-15 thru 20)—ADV PG 95
Diamond Wire & Cable Co 445 Park Ave Sycamore Ill (2-4-6-7-8-11-12-15-17-18-19-20)
Driver (Wilbur B) Co 1875 McCarter Highway Newark 4 NJ (7-11)
Essex Wire Corp Wire & Cable Div 2601 S Adams Marion Ind (1-2-3-4-6-8-9-10-11-12-15-17-18-19-20)
Gar Wood Industries Inc Wayne Mich (23)
●GENERAL CABLE CORP 730 Third Ave New York 17 NY (1 thru 23-25-27-28-29 thru 35)—ADV PG 82-83
General Electric Co Wire & Cable Dept 1285 Boston Ave Bridgeport 2 Conn (1-2-6-9-11-13-14-15-18-19-21)
General Insulated Wire Works 69 Gordon Ave Providence 5 RI (2-6-10-11-17-18-19)
●GRAYBAR ELECTRIC CO INC 420 Lexington Ave NY 17 NY (2-6-12-13-17-18)—ADV PG 2
●HATFIELD WIRE AND CABLE DIV CONTINENTAL COPPER & STEEL INDUSTRIES INC 487 Hillside Ave Hillside 5 NJ (1-2-3-4-6-8-9-11-12-14 thru 20-23-29-35)—ADV PG 89
Hendrix Wire & Cable Corp Milford NH (17)
Hitemp Wires Co 1200 Shames Dr Westbury NY (13-19)
Kaiser Aluminum & Chemical Sales Inc Kaiser Center 300 Lakeside Dr Oakland 12 Calif (1 thru 6-8-10-14 thru 19-21-23-25-30-31-32-34-35)
Kennecott Wire & Cable Div Okonite Co Phillipsdale (Rumford 16) R I (7-13-16-19)
Lincoln Electric Co 22801 St Clair Ave Cleveland 17 Ohio (23)
Markel (L Frank) & Sons Morristown Pa (25)
Miller Electric Co 120 Main St Pawtucket RI (11-12-19-22-28-29)
Narragansett Wire Co 1125 Main St Pawtucket RI (1-6-10-17-18)
National Electric Div H K Porter Co Inc Porter Bldg Pittsburgh 19 Pa (2-6-10-14-17-18-19-21)
National-Standard Co 601 N 8th St Niles Mich (10-16-17-19)
New England Electrical Works Inc 365 Main St Lisbon NH (10-13-19-39)
Nichols Wire & Aluminum Co 1725 Rockingham Rd Davenport Iowa (26)
Normandy Electric Wire Corp 125 Second St Brooklyn 31 NY (14)
Okonite Co Passaic NJ (1-5-6-7-8-9-12 thru 21)
Olin Conductors Metals Div P O Box 989 Chattanooga Tenn (17)
Page Steel & Wire Div American Chain & Cable Co Inc P O Box 692 Monessen Pa (23)
Partrick & Wilkins Co 51 N Seventh St Phila 6 Pa (20)
Phalo Plastics Corp 530 Boston Turnpike Shrewsbury Mass (2-6-8-19)
●PHELPS DODGE COPPER PRODUCTS CORP 300 Park Ave New York 22 NY (1-2-3-6-9-10-13-15-17-18-19)—ADV PG 76-77
Plastic Wire & Cable Corp E Main St Jewett City Conn (2-3-6-9-15-19-20)
Plastoid Corp 42-61 24th St LIC 1 NY (2-6-9-12-19-20)
Radix Wire Co 26260 Lakeland Blvd Cleveland 32 Ohio (2-3-6-7-10-11-12-19-20-32-34)
Rees (Mackworth G) Inc 1573 E Forest Ave Detroit 7 Mich (23)
Reynolds Metals Co Richmond 18 Va (17)
Rhode Island Insulated Wire Co Inc 50 Burnham Ave Cranston RI (2-11-12-19)
Ringsdorff Carbon Corp Box 22 East McKeesport Pa (27)
Rockbestos Wire & Cable Co Nicoll and Canner Sts New Haven 4 Conn (2-6-7-8-19-21)
Roebling's (John A) Sons Corp 640 S Broad St Trenton 2 NJ (1-6-7-8-10-13-15 thru 19-21)
●ROME CABLE DIV OF ALCOA 421 Ridge St Rome NY (1-2-6-8-10-12-13-14-16 thru 20-23-37)—ADV PG 42
Royal Electric Corp 95 Grand Ave Pawtucket RI (2-4-6-9-11-12-19-20-22-23-28-29-36)
Seeger-Williams Inc 4 Norman St Bridgeport 5 Conn (22)
Sequoia Wire & Cable Co 2201 Bay Rd (P O Box 1007) Redwood City Calif (2-6-19-20)
Simplex Wire & Cable Co 79 Sidney St Cambridge 39 Mass (19)
Sittler Corp 18 N Ada St Chicago 7 Ill (10-19)
South River Metal Products Co Inc 377 Turnpike South River NJ (10)
Southwire Co Carrollton Ga (3-6-10-17-19)
Star-A Electric Mfg Co Inc 269 Meserole St Brooklyn 6 NY (2-11-12)
Surprenant Mfg Co 199 Washington St Boston 8 Mass (2-6-19)
Telcon Inc P O Box 216 Pacific Palisades Calif (19-21)
Tensolite Insulated Wire Co Inc West Main St Tarrytown NY (2-6-13-19)
Tevco Insulated Wire 108 E Prospect Ave Burbank Calif (19)
Times Wire & Cable Div International Silver Co Wallingford Conn (6)
Titchener (E H) & Co 67 Clinton St Binghamton NY (10)
●TRIANGLE CONDUIT & CABLE CO INC Triangle & Jersey Aves New Brunswick NJ (1-2-6-15-17-18-21-29-31-32)—ADV PG 3rd Cover
Victor Electric Wire & Cable Corp 618 Main St West Warwick RI (2-6-12-19)
Walker Brothers P O Box 33 Conshohocken Pa (6-18-19)
Watteredge Co 19629 West Lake Rd Rocky River 16 Ohio (24)
Western Insulated Wire Co 2425 E 30th St Los Angeles 58 Calif (2-4-6-10-15-17-18-20-23-38)
●WESTINGHOUSE ELECTRIC SUPPLY CO 3 Gateway Center (Box 448) Pittsburgh 30 Pa (1 thru 21)—ADV PG 2nd Cover
Whitney Blake Co 102 Pershing St New Haven 14 Conn (6-10-16-19)

6E. PORTABLE CORD SETS

1. Extension
2. Molded integral
3. Range & dryer
4. Self-coiling & retractable
5. Appliance
6. Remote control
7. Extension cord reels
8. Static discharge grounding reels

Includes sets with appropriate connecting bodies at both ends. For cords with lamps attached, see "Trouble Lamps" in index. For cord without connectors, see "Cord"

Accurate Insulated Wire Corp 25 Fox St New Haven 13 Conn (1-2-3-4)
Acorn Insulated Wire Co 36 Freeman St. Pawtucket RI (1-3)
American Electric Cable Co 181 Appleton St Holyoke Mass (1)
Anaconda Wire & Cable Co 25 Broadway New York 4 NY (1-3)
Apex Wire & Cable Corp 237 37th St Brooklyn 32 NY (1-2)
Appleton Electric Co 1701-59 Wellington Ave Chicago 13 Ill (7)
Associated Engineering Corp 65 Kent St Brookline 46 Mass (1-2)
B & M Electric Corp 168 7th St Brooklyn 15 NY (1-2-6)
Beckley Electric Co Inc 468-470 Grand Ave Brooklyn 38 NY (1-2)
Belden Mfg Co P O Box 5070A Chicago 80 Ill (1-2-3)
Bell Electric Co 1844-50 W 21 St Chicago 8 Ill (1)
Benjamin Reel Products Inc 10700 Broadway Cleveland 25 Ohio (1-7-8)
Black (M) Mfg Co 300-08 N Third St Phila 6 Pa (1)
Cable Electric Products Inc 234 Daboll St Providence 7 RI (1-3-5)
Capitol Stage Lighting Co Inc 527 W 45 St New York 36 NY (1)
Carol Cable Co 190 Middle St Pawtucket RI (1)
Circle F Mfg Co 720 Monmouth St Trenton 4 NJ (3)
Cordomatic Div Vacuum Cleaner Corp of America 1724 W Indiana Ave Phila 32 Pa (4)
Cornish Wire Co Inc 50 Church St NY 7 NY (1-3)
Crescent Co Inc 20 Central Ave Pawtucket RI (1-2)
Diamond Wire & Cable Co 445 Park Ave Sycamore Ill (1-2-3-4)
Eagle Electric Mfg Co Inc 23-10 Bridge Plaza South Long Island City 1 NY (1-2-3)
Eastern Insulated Wire Corp Trenton NJ (2-5)
Electri-Cord Mfg Co Inc 2554-2568 E 18 St Brooklyn 35 NY (5)
Ericson Mfg Co 1660 Hayden Ave Cleveland 12 Ohio (1-2-7)
Essex Wire Corp Wire & Cable Div 2601 S Adams Marion Ind (3)
Faraday Inc 2011 W Beecher Rd Adrian Mich (2)
Gem Electric Mfg Co Inc. 237 37th St Brooklyn NY (1)
General Cable Corp 730 Third Ave New York 17 NY (1-2-3-4)
General Electric Co Wire & Cable Dept 1285 Boston Ave Bridgeport 2 Conn (1-3)
General Electric Co Wiring Device Dept 95 Hathaway St Providence RI (1-2-3)
General Insulated Wire Works 69 Gordon Ave Providence 5 RI (1-2-4)
Haft & Sons Inc 950 Kent Ave Brooklyn 5 NY (1)
Kaiser Aluminum & Chemical Sales Inc Kaiser Center 300 Lakeside Dr Oakland 12 Calif (2)
Koiled Kords Inc Box K Hamden Conn (4)
Midwest Electric Products Inc 1515 N Front St Mankato Minn (3)
Miller Electric Co 120 Main St Pawtucket RI (1 thru 6)
Murray (D A) Co Inc 632 N Mill St Tipton Ind (1-2)
Phalo Plastics Corp 530 Boston Turnpike Shrewsbury Mass (1-2-3)
●PHELPS DODGE COPPER PRODUCTS CORP 300 Park Ave New York 22 NY (1)—ADV PG 76-77
Plastic Wire & Cable Corp E Main St Jewett City Conn (1-2-3-4)
Rhode Island Insulated Wire Co Inc 50 Burnham Ave Cranston RI (1)
Riverside Mfg & Electrical Supply Co 10228 Michigan Ave Dearborn Mich (2)
Rodale Mfg Co Inc 6th & Minor Sts Emmaus Pa (1-3)
Royal Electric Corp 95 Grand Ave Pawtucket RI (1-3)
Seeger-Williams Inc 4 Norman St Bridgeport 5 Conn (2)
Standard Portable Cord Co Inc Mayville NY (1)
Star-A Electric Mfg Co Inc 269 Meserole St Brooklyn 6 NY (1-3)
Victor Electric Wire & Cable Corp 618 Main St West Warwick RI (2)
Wilkoff (M J) Co 823 Locust Pittsburgh 19 Pa (3)

6F. CONNECTING & TERMINATING DEVICES

1. **Connectors—pressure**
2. **Connectors—solderless**
3. **End seals**
4. **Lugs & terminals**
5. **Potheads**
6. **Splices, kits & equipment**
7. **Terminal blocks & binding posts**
8. **Screw-on wire connectors**
9. **Collecting rings, shoes & devices**
10. **Ground clamps**
11. **Welding cable connectors**
12. **Lifting magnet connectors**
13. **Environment-resistant connectors**
14. **Tube-to-cable connectors**
15. **Temporary power connectors**
16. **Power connectors, self-grounding**
17. **Split-tinned connectors**

Accessories used for splicing, terminating, or connecting wire and cable to equipment or fittings.

AMP Inc Eisenhower Blvd Harrisburg Pa (1-4-6)
APM Corp 41 Honeck St Englewood NJ (16)
Adalet Mfg Co 14300 Lorain Ave Cleveland 11 Ohio (3-5)
Allen-Bradley Co 136 W Greenfield Ave Milwaukee 4 Wis (7)
Allied Industries Inc P O Box 119 Ogallala Neb (3)
Anaconda Wire & Cable Co 25 Broadway New York 4 NY (5-6)
Anderson (Albert & J M) Mfg Co 289 A St Boston 10 Mass (11-15)
Anderson Electric Corp P O Drawer 2151 Birmingham 1 Ala (1-3-4-6-10)
Anthony (F M) Co 773 University Ave Berkeley 10 Calif (1-4-6)
Bishop Mfg Corp 10 Canfield Rd Cedar Grove (6)
Blackburn (Jasper) Corp 1525 Woodson Rd St Louis 14 Mo (1-4)
Blaco Mfg Co 6541 Euclid Ave Cleveland 3 Ohio (10)
Bridgeport Fittings Inc 209 Center St Bridgeport 2 Conn (10-14)
●BUCHANAN ELECTRICAL PRODUCTS CORP 434 US Route 22 Hillside NJ (1-4-6-7)—ADV PG 110-118-120
Burndy Corp Norwalk Conn (1-4-6-7-8)
Cam-Lok Div Empire Products Inc 9213 Blue Ash Rd Cincinnati 42 Ohio (1-4-6)
Camblock Corp 825 Bronx River Ave New York 72 NY (7)
Central Porcelain Co 507 Railroad St Columbiana Ohio (1-8)
●CROUSE-HINDS CO Syracuse 1 NY (13)—ADV PG 4th cover
Curtis Development & Mfg Co 3244 N 33 St Milwaukee 16 Wis (7)
Dante Electric Mfg Co Bantam Conn (1-4)
Delta-Star Electric Div H K Porter Co Inc 2437 Fulton St Chicago 12 Ill (1-3-4-5-9)
Dolco Mfg Co 2350 Curry St Long Beach 5 Calif (10)
Dossert Mfg Corp 249-255 Huron St Brooklyn 22 NY (1-4-6)
ETC Inc 990 E 67 St Cleveland 3 Ohio (1-4)
Eagle Electric Mfg Co Inc 23-10 Bridge Plaza South Long Island City 1 NY (8)
Earl (H W) & Co 6225 S W 8th St Miami 44 Fla (11-12)
Earl Electric Mfg Corp 35-20 Borden Ave Long Island City NY (4)
Eastern Specialty Co 3617 N 8th St Phila 40 Pa (7)
Electro Dynamics Corp 4917 St Elmo Ave Bethesda 14 Md (1-2)
Elliott Electric Mfg Corp 50-30 98th St Corona 68 NY (1-3-4-6-8)
Emerson Plastics Corp 1383 Seabury Ave Bronx 61 NY (7)
Erico Products Inc 2070 E 61 Pl Cleveland 3 Ohio (1-4-11)
Esco Mfg Co P O Box 1039 Greenville Texas (5)
Fargo Mfg Co Inc 845 Main St Poughkeepsie NY (1)
Frankel Connector Co 27 Vestry St NY 13 NY (2-4)
G & W Electric Specialty Co 3500 W 127 St Blue Island Ill (3-5-6)
General Electric Co Wiring Device Dept 95 Hathaway St Providence RI (1-4)
General Products Corp 107 Salem St Union Springs NY (7)
Green (R H) Inc 1201 24th St Oakland 7 Calif (10)
Hall (William) Co Canal Bank Windsor Locks Conn (6)
Hessel (N F) Co Inc 74 Beekman St NY 38 NY (7-11-15)
Hi-Scale Products Corp 132 W 22nd St NY 11 NY (2)
Hoffman Engineering Corp 1050 Tyler St Anoka Minn (15)
Hollingsworth Co Solderless Terminal Div Box 430 Phoenixville Pa (1)
Holub Industries Inc 442 Elm St Sycamore Ill (1-8)
Husky Products Inc 5300 Vine St Cincinnati 17 Ohio (6)
●IDEAL INDUSTRIES INC 5136 Park Ave Sycamore Ill (1-8)—ADV PG 103
Ilsco Corp 4730 Madison Rd Cincinnati 27 Ohio (1-7)
Joslyn Mfg & Supply Co 3700 S Morgan St Chicago 9 Ill (1-6)
Joy Mfg Co H W Oliver Bldg Pittsburgh 22 Pa (1-5-6)
Joy Mfg Co Electrical Products Div 1201 Macklind Ave St Louis 10 Mo (1-3-5)
Kearney (James R) Corp 4236 Clayton Ave St Louis 10 Mo (1)
Kolton Electric Mfg Co 123 New Jersey Railroad Ave Newark 5 NJ (1-4-7)
Kortick Mfg Co 5600 Third St San Francisco 24 Calif (10)
Krueger & Hudepohl Inc 1041 Evans St Cincinnati 4 Ohio (1-4)
Kulka Electric Corp 633 S Fulton Ave Mount Vernon NY (1-4-7)
Line Material Industries McGraw-Edison Co 700 W Michigan St Milwaukee Wis (1-6)
Lint (Clyde W) 2323 W 18 St Chicago 8 Ill (1)
M & W Electric Mfg Co Inc S Walnut St (P O Box 87) East Palestine Ohio (10)
Marathon Special Products Corp 12th & Cranberry Sts Erie Pa (7)
Marshall (John) Associates Inc Box 2463 Bridgeport 8 Conn (1)
Mend-It Sleeve Mfg Co 3125 Gloria Terrace Lafayette Calif (1)
Mercury Products Inc Boston Post Rd Guilford Conn (2-4-10)
Metalectrics Inc 627 Greenwich St New York 14 NY (1-8)
Midwest Electric Mfg Co 1639 Walnut St Chicago 12 Ill (10)
Minnesota Mining and Mfg Co Electrical Products Div 900 Bush Ave St Paul 6 Minn (1-6)
●O Z ELECTRICAL MFG CO INC 262 Bond St Brooklyn 17 NY (1-4-10-14)—ADV PG 107
Ohio Brass Co 380 N Main St Mansfield Ohio (5)
Okonite Co Passaic NJ (6)
●PLM PRODUCTS INC 3871 W 150 St Cleveland 11 Ohio (5-6)—ADV PG 102
Pekou Co 1227 McDonald Ave Brooklyn 30 NY (1-6-17)
Penn-Union Electric Corp 315 State St Erie Pa (1-2-4-6-7-10-14)
Porcelain Products Co 224 N Patterson St Carey Ohio (2-10)
Preformed Line Products Co 5349 St Clair Ave Cleveland 3 Ohio (6)
Rattan Mfg Co 10 Wall St (P O Box 1745) New Haven 7 Conn (1-10-17)
Red Seal Electric Co 10307 Detroit Ave Cleveland 2 Ohio (3)
Richards Mfg Co Ltd 152 Coit St Irvington NJ (1-4-6)
Ringsdorff Carbon Corp Box 22 McKeesport Pa (9)
Rusgreen Mfg Co 14262 Birwood Ave Detroit 38 Mich (1-4-5-6)
Sherman (H B) Mfg Co 22 Barney Battle Creek Mich (1)
Southern Electrical Equipment Co 308 W Bland at Mint St Charlotte 3 NC (1)
Square D Co Executive Plaza Park Ridge Ill (4-7)
Standard Electric Time Co 89 Logan St Springfield 2 Mass (7)
Star-A Electric Mfg Co Inc 269 Meserole St Brooklyn 6 NY (8)
States Co 19 New Park Ave Hartford 6 Conn (7)
Superior Electric Co 83 Laurel St Bristol Conn (7)
Surprenant Mfg Co 199 Washington St Boston 8 Mass (3)
Suttle Equipment Corp 135 S LaSalle St Chicago 3 Ill (7)
Thomas & Betts Co 36 Butler St Elizabeth 1 NJ (1-4-6-8)
Unimatic Corp Sherwood Lane Caldwell NJ (1)
Vaco Products Co 317 E Ontario St Chicago 11 Ill (7)
Wama Co Industrial Bldg Baltimore 2 Md (7)
Watteredge Co 19629 West Lake Rd Rocky River 16 Ohio (4)
●WEAVER (J A) CO 2110 Howard St St Louis 6 Mo (1)—ADV PG 126
Yorkville Metal Products Co 627 Greenwich St New York 14 NY (1-8)

6G. CONDUCTOR SUPPORTS

1. **Bushing insulators & wireholders**
2. **Open wiring cleats, knobs & tubes**
3. **Hangers & grips**
4. **Racks, framing & ladders**
5. **Staples, clamps, clips & straps**
6. **Trays**
7. **Troughs**
8. **Drive & bridle rings**
9. **Cable ties**
10. **Cable spacers**

Accessories for holding wire and cable in place from source to load. See also "Raceways."

Adalet Mfg Co 14300 Lorain Ave Cleveland 11 Ohio (1)
Allen-Stevens Conduit Fittings Corp 33-53 62nd St Woodside 77 NY (5)
Allis-Chalmers Mfg Co 930 S 70 St Milwaukee 1 Wis (1)
American Steel & Iron Works 5801 S Lowe Ave Chicago 21 Ill (4)
Anderson Electric Corp P O Drawer 2151 Birmingham 1 Ala (5)

Arrow Fastener Co Inc 1 Junius St Brooklyn 12 NY (5)
Atlas Tack Corp Pleasant & South Sts Fairhaven Mass (5)
Bay-Tronic Co 43 Evergreen St Bayonne NJ (10)
●BLACKHAWK INDUSTRIES 250 S Main St Dubuque Iowa (1)—ADV PG 88
Bridgeport Fittings Inc 209 Center St Bridgeport 2 Conn (1-5)
Buchanan Electrical Products Corp 434 U S Route 22 Hillside NJ (5)
Cable Electric Products Inc 234 Daboll St Providence 7 RI (5)
Capson Mfg Co 2565 W Fullerton Ave Chicago 47 Ill (5)
Central Porcelain Co 507 Railroad St Columbiana Ohio (2)
●CHALFANT PRODUCTS CO INC 11525 Madison Ave Cleveland 2 Ohio (4-6-7)—ADV PG 94
Cope (T J) Div Rome Cable Corp Third & Walnut Sts Collegeville 5 Pa (4-7)
Delta-Star Electric Div H K Porter Co Inc 2437 Fulton St Chicago 12 Ill (2-3-6-7)
Dolco Mfg Co 2350 Curry St Long Beach 5 Calif (10)
●EFFICIENCY ELECTRIC & MFG CO Park Ave Ext (P O Box 30) East Palestine Ohio (1-2-4)—ADV PG 120-122
Electrovert Inc 124 E 40 St New York 16 NY (5-9)
Eliza Metal Products Co Box 408 Birdgeville Pa (7)
Elliott Electric Mfg Corp 50-30 98th St Corona 68 NY (1)
Emerson Apparatus Co 171 Tremont St Melrose Mass (5)
Emerson Plastics Corporation 1383 Seabury Ave Bronx 61 NY (1)
Erico Products Inc 2070 E 61 Pl Cleveland 3 Ohio (5)
Fasform Div Heller Roberts Mfg Corp 6115 Carnegie Ave Cleveland 1 Ohio (8)
Fletcher Mfg Co Box 246 Englewood Ohio (4-5)
Fullman Mfg Co 1209-1215 Jefferson St Latrobe Pa (5)
G-C Electronics Co 400 S Wyman St Rockford Ill (5)
General Metals Inc 858 Goldsbro Greensboro NC (7)
Glastic Corp 4321 Glenridge Rd Cleveland 21 Ohio (1)
Greene (R H) Inc 1201 24th St Oakland 7 Calif (5)
Hall (William) Co Canal Bank Windsor Locks Conn (3-5)
Handy Angle Div Lug-All Co 355 Lancaster Ave Haverford Pa (4)
Hendrix Wire & Cable Corp Milford NH (10)
Heyman Mfg Co Kenilworth 20 NJ (1)
Hoffman Engineering Corp 1050 Tyler St Anoka Minn (7)
Holub Industries Inc 442 Elm St Sycamore Ill (5)
Husky Products Inc 5300 Vine St Cincinnati 17 Ohio (3-4-5-6-7)
Johns-Manville 22 E 40 St New York 16 NY (6)
Jordan Industries Inc 3030 N W 75 St Miami 47 Fla (5)
Joslyn Mfg & Supply Co 3700 S Morgan St Chicago 9 Ill (1)
Kellems Co Inc 15 Williams St Stonington Conn (3)
●KEYSTONE MFG CO 23328 Sherwood Rd Warren Mich (7)—ADV PG 123
Knox Porcelain Corp 2706 Mynders Ave (P O Box 2031) Knoxville 1 Tenn (2)
Liebfried (H) Mfg Corp 95-101 Guernsey St Brooklyn 22 NY (3-4)
Line Material Industries McGraw-Edison Co 700 W Michigan St Milwaukee Wis (4)
Lint (Clyde W) 2323 W 18 St Chicago 8 Ill (2)
M & T Welding Products Corp 703 37th Ave Oakland Calif (4)
M & N Electric Mfg Co Inc S Walnut St (P O Box 87) East Palestine Ohio (4)
Madison Equipment Co 5405 Detroit Ave Cleveland 2 Ohio (5-8)
Maryland Lava Co Box 127 Bel Air Md (1)
Merwin Mfg Co 19th & German Sts Erie Pa (5)
Metalectrics Inc 627 Greenwich St New York 14 NY (1)
Midwest Electric Mfg Co 1639 Walnut St Chicago 12 Ill (5)
Minerallac Electric Co 25 N Peoria St Chicago 7 Ill (1)
●O Z ELECTRICAL MFG CO INC 262 Bond St Brooklyn 17 NY (1)—ADV PG 107
Olin Conductors Metals Div P O Box 989 Chattanooga Tenn (10)
PLM Products Inc 3871 W 150 St Cleveland 11 Ohio (10)
●P-W INDUSTRIES INC 11200 Roosevelt Blvd Philadelphia 15 Pa (4-7)—ADV PG 112
●PAINE CO 6 Westgate Rd Addison Ill (5)—ADV PG 94
Palmer Electric & Mfg Co 24 Water St Wakefield Mass (7)
Porcelain Products Co 224 N Patterson St Carey Ohio (2)
●POWER-STRUT DIV VAN HUFFEL PRODUCTS INC Dietz Rd Warren Ohio (3-4-5)—ADV PG 93
Preformed Line Products Co 5349 St Clair Ave Cleveland 3 Ohio (10)
Queen Products Co Inc Thirteenth & Rowan Sts Louisville 3 Ky (7)
Raico Mfg Co 123-141 N Albany Ave Chicago 12 Ill (3)
Red Seal Electric Co 10307 Detroit Ave Cleveland 2 Ohio (1)
Rodale Mfg Co Inc 6th & Minor Sts Emmaus Pa (2)
Rome Cable Div of Alcoa 421 Ridge St Rome NY (10)
Rusgreen Mfg Co 14262 Birwood Ave Detroit 38 Mich (5)
Russell & Stoll Co Inc 125 Barclay St NY 7 NY (1)
Seeger-Williams Inc 4 Norman St Bridgeport 5 Conn (5)
Spring City Electrical Mfg Co Spring City 85 Pa (1)
●STEEL CITY ELECTRIC CO 1207 Columbus Ave Pittsburgh 33 Pa (1-2-3-4-5)—ADV PG 104
Superior Porcelain Co 931½ Market St Parkersburg W Va (2)
Superior Staple Mfg Co 40 Commercial St Fitchburg Mass (5)
TA Mfg Corp 4607 Alger St Los Angeles 39 Calif (1)
●THIEL TOOL & ENGINEERING CO 1417 N Market St St Louis 6 Mo (5)—ADV PG 127
Thomas & Betts Co Inc 36 Butler St Elizabeth 1 NJ (9)
Titchener (E H) & Co 67 Clinton St Binghamton NY (5)
Unistrut Products Co 933 Washington Blvd Chicago 7 Ill (4)
Wadsworth Electric Mfg Co Inc 20-34 W 11 St (Box 272) Covington Ky (7)

6H. MISC. CONDUCTORS

1. Busbar & supports, copper
2. Crane rails
3. Busbar & supports, aluminum

Aluminum Co of America 1501 Alcoa Bldg Pittsburgh 19 Pa (1)
Anderson Electric Corp P O Drawer 2151 Birmingham 1 Ala (1)
Burndy Corp Norwalk Conn (1)
Chase Brass & Copper Co Inc 236 Grand St Waterbury 20 Conn (1)
Dossert Mfg Corp 249-255 Huron St Brooklyn 22 NY (1)
Electric Materials Co Box 390 North East Pa (1)
Erico Products Inc 2070 E 61 Pl Cleveland 3 Ohio (1)
General Electric Co Apparatus Sales Schenectady 5 NY
Leonard Electric Mfg Co 3907 Perkins Ave Cleveland 14 Ohio
Memco Engineering & Mfg Co Inc Commack LI NY (1)
●O Z ELECTRICAL MFG CO INC 262 Bond St Brooklyn 17 NY (1)—ADV PG 107
Penn-Union Electric Corp 315 State St Erie Pa (1)
Powercraft Corp 2215 De Kalb St St Louis 4 Mo (1)
Red Seal Electric Co 10307 Detroit Ave Cleveland 2 Ohio (1-2)
Revere Copper & Brass Inc 230 Park Ave NY 17 NY (1)
Reynolds Metals Co Richmond 18 Va (3)
Rome Cable Div of Alcoa 421 Ridge St Rome NY (1)
Rusgreen Mfg Co 14262 Birwood Ave Detroit 38 Mich (1)
Southern Electrical Equipment Co 308 W Bland at Mint St Charlotte 3 NC (1)
Young Electric & Mfg Co Inc 2134 Curtis Denver 2 Colo (1)

TECHNICAL LITERATURE

To obtain the following literature, enter the appropriate Code Numbers* on the Free Information cards elsewhere in this issue.

*Code No.	Description, Pages Catalog No. & Mfr.
6-1	Reels; 46p; Cat. No. 25-A (Aero-Motive)
6-2	Cable and Portable Cords; 23p; Cat. No. 72A (Carol)
6-3	Communication Wire & Cable; 32p; Cat. No. 108 (Columbia Wire)
6-4	Wire and Cable; 24p; Cat. No. 3 (Ettco)
6-5	Specifications for Quality Engineered Telephone Cables; 32p; Cat. No. T-5-60 (General Cable)
6-6	Specifications for Telephone Cables; 21p; Cat. No. T-9-60 (General Cable)
6-7	Transmission Properties of Polyethylene Insulated Cables at Voice and Carrier Frequencies; 23p; Cat. No. T-14-60 (General Cable)
6-8	Mineral Insulated Cable; 16p; Cat. No. S-2 (General Cable)
6-9	Telephone Wire and Cable; 80p; Cat. No. T-3-60 (General Cable)
6-10	Flexible Cords & Cord Sets; 48p; Cat. No. SG-2-59 (General Cable)
6-11	Wire and Cable; 15p; Cat. No. 1105B (Okonite)
6-12	Potheads and Connectors; 58p (Rusgreen)
6-13	PVC Insulated Leads for Oil-Filled Transformers; 7p; Cat. No. RCT 320 (Rome)
6-14	Corona-Level Measurements on Insulated Cable; 11p; Cat. No. RCT 711 (Rome)
6-15	Metallic Sheathed Cable Systems; 12p (Simplex)
6-16	Connectors & Fittings; 32p (Weaver)
6-17	Welding Cables and Jumpers; 20p; Cat. Sec. 5 (Rees)
6-18	Application Experience with Cable Having Corrugated Metal Sheaths; 12p (Simplex)
6-19	Metallic Sheathed Cable Systems; 12p (Simplex)

SECTION 7. RACEWAY AND FITTINGS

Raceway tools are listed in Section 12. Tray and troughs and other conductor supports are listed in Section 6.

7A. AUXILIARY GUTTERS

For increasing size of cabinets and panels to provide additional wiring room.

Adam (Frank) Electric Co 3647 Windsor Pl St Louis Mo
Alwalt Mfg Co Inc 1706 Lapham Dr (P O Box 1171) Modesto Calif
B & C Metal Stamping Co P O Box 2506 Atlanta Ga
Burns (James F) Co 1601 Industrial Highway Pennsauken NJ
Delta-Star Electric Div H K Porter Co Inc 2437 Fulton St Chicago 12 Ill
General Metals Inc 858 Goldsbro Greensboro NC
Gibbons Metal Products 730 Gibbons St Los Angeles 31 Calif
●HOFFMAN ENGINEERING CORP 1050 Tyler St Anoka Minn—ADV PG 102-118
●KEYSTONE MFG CO 23328 Sherwood Rd Warren Mich—ADV PG 123
Leonard Electric Mfg Co 3907 Perkins Ave Cleveland 14 Ohio
Metropolitan Electric Mfg Co 2250 Steinway St Long Island City 5 N Y
National Electric Div H K Porter Co Inc Porter Bldg Pittsburgh 19 Pa
Parker Electrical Mfg Co 221 Washington St Oakland 7 Calif

Queen Products Co Inc Thirteenth & Rowan Sts Louisville 3 Ky
Square D Co Executive Plaza Park Ridge Ill
Sun Electric Products Inc 28 S Day St Orange NJ
Wadsworth Electric Mfg Co Inc 20-34 W 11th St (Box 272) Covington Ky
●WESTINGHOUSE ELECTRIC SUPPLY CO 3 Gateway Center (Box 448) Pittsburgh 30 Pa—ADV PG 2nd cover
Young Electric & Mfg Co Inc 2134 Curtis Denver 2 Colo
Zinsco Electrical Products 729 Turner Los Angeles 12 Calif

7B. BUSWAY

1. **Low-impedance feeder**
2. **Plug-in**
3. **Current-limiting**
4. **Trolley duct**
5. **Excitation**
6. **High frequency**

Metal-enclosed busbars for exposed wiring installation. Trolley type incorporates bus or conductors accessible to sliding shoes or connectors for power feed.

Adam (Frank) Electric Co 3647 Windsor Pl St Louis Mo (1-2)
Calvert Co 19851 Ingersoll Dr Rocky River 16 Ohio (1)
Continental Electric Equipment Co Box 1055 Cincinnati 1 Ohio (1-2)
Delta-Star Electric Div H K Porter Co Inc 2437 Fulton St Chicago 12 Ill (4)
Electric Distribution Products Inc 2200 31st St S W Allentown Pa (1-2)
Empire Switchboard Co Inc 810 Fourth Ave Brooklyn 32 N Y (1-2)
●FEDERAL PACIFIC ELECTRIC CO 50 Paris St Newark 5 N J (2-3-4)—ADV PG 105
Feedrail Corp 125 Barclay St New York 7 NY (4)
General Electric Co Distribution Assemblies Dept 41 Woodford Ave Plainville Conn (1-2-3-4)
●GENERAL ELECTRIC SUPPLY CO 1260 Boston Ave Bridgeport Conn (1 thru 4)—ADV PG 84-85
Insul-8-Corp 1369 Industrial Rd San Carlos Calif (1-2-4)
I-T-E Circuit Breaker Co BullDog Electric Products Div 7610 Jos Campau Detroit Mich (1-2-4)
Metropolitan Electric Mfg Co 2250 Steinway St Long Island City 5 N Y (1-2-3)
●NATIONAL ELECTRIC DIV H K PORTER CO INC Porter Bldg Pittsburgh 19 Pa (1-2)—ADV PG 97-98
Ringsdorff Carbon Corp Box 22 East McKeesport Pa (4)
Square D Co Executive Plaza Park Ridge Ill (1-2-3)
Westinghouse Electric Corp P O Box 2278 Pittsburgh 30 Pa (5)
Westinghouse Electric Corp Standard Control Div Beaver Pa (1-2-3-5-6)
●WESTINGHOUSE ELECTRIC SUPPLY CO 3 Gateway Center (Box 448) Pittsburgh 30 Pa (1-2-3)—ADV PG 2nd cover
Young Electric & Mfg Co Inc 2134 Curtis Denver 2 Colo (1)
Zinsco Electrical Products 729 Turner Los Angeles 12 Calif (1-2)

7C. CELLULAR FLOOR RACEWAY SYSTEMS

1. **Metallic**
2. **Non-metallic**
3. **Concrete**
4. **Complete adjustable floors**

Systems which permit use of structural materials for enclosing electrical conductors.

Ceco Steel Products Corp 5601 W 26 St Chicago 50 Ill (1)
Conduflor Corp 13560 Lorain Ave (P O Box 2748) Cleveland 11 Ohio (1-3)
General Electric Co Chemical & Metallurgical Div Conduit Products Dept 980 Warren Ave Niles Ohio (1)
Howard Electric Co 1950 Ruby St Melrose Park Ill (1)
●NATIONAL ELECTRIC DIV H K PORTER CO INC Porter Bldg Pittsburgh 19 Pa (1)—ADV PG 97-98
Square D Co Executive Plaza Park Ridge Ill (1)
Unistrut Products Co 933 Washington Blvd Chicago 7 Ill (4)
Walker Brothers P O Box 33 Conshohocken Pa (1)
Wheatland Electric Products Co 500 Logan St Carnegie Pa (1)

7D. CONDUIT & DUCT

1. **Aluminum**
2. **Asbestos-cement**
3. **Clay**
4. **Fiber**
5. **Steel**
6. **Steel, plastic-coated**
7. **Wrought iron**
8. **Soapstone**
9. **Plastic**
10. **Alloy**
11. **Non-metallic (loom)**
12. **Fiberglass**

For protection of conductors between source and load. For accessories, see "Conduit Fittings" in index.

Aluminum Co of America 1501 Alcoa Bldg Pittsburgh 19 Pa (1)
American Hard Rubber Co Ace Rd Butler NJ (9)
American Metal Moulding Co 146 Colt St Irvington NJ (6)
Brown Co 150 Causeway St Boston Mass (4)
Busada Mfg Corp 32-21 Downing St Flushing 54 NY (9)
Byers Co Clark Bldg Pittsburgh 30 Pa (7-9)
Carlon Products Corp P O Box 133 Aurora Ohio (9)
Chesflex Corp 684 Nepperhan Ave Yonkers NY (9)
Clifton Conduit Co 3300 Eastbourne Ave Baltimore 24 Md (5)
Consolidated Pipe Co of America 1066 Home Ave Akron Ohio (9)
Crescent Plastics Inc 955 Diamond Ave Evansville 7 Ind (9)
Electric Hose & Rubber Co 12th & Dure Sts Wilmington Dela (9)
General Electric Co Chemical & Metallurgical Div Conduit Products Dept 980 Warren Ave Niles Ohio (5-6)
●GRAYBAR ELECTRIC CO INC 420 Lexington Ave NY 17 NY (5)—ADV PG 2
Industrial Plastic Fittings Co 3891 W 150 St Cleveland 11 Ohio (9)
Jasco Aluminum Products Div Unexcelled Chemical Corp 31 Nassau Terminal Rd New Hyde Park NY (1)
Johns-Manville 22 E 40 St New York 16 NY (2)
Kaiser Aluminum & Chemical Sales Inc Kaiser Center 300 Lakeside Dr Oakland 12 Calif (1)
Kraloy/Chemtrol Co Electrical Conduit Div 402 W Central Ave Santa Ana Calif (9)
Kyova Fiber Pipe Co 1912 S First St Ironton Ohio (4)
Laclede Steel Co Arcade Bldg St Louis 1 Mo (5)
Line Material Industries McGraw-Edison Co 700 W Michigan St Milwaukee Wis (4)
Mark (Clayton) & Co 1900 Dempster St Evanston Ill (1-5)
Maryland Lava Co Box 127 Bel Air Md (8)
Natco Corp 327 Fifth Ave Pittsburgh 22 Pa (3)
National Electric Div H K Porter Co Inc Porter Bldg Pittsburgh 19 Pa (5)
National Supply Div Armco Steel Corp Two Gateway Center (P O Box 416) Pittsburgh 30 Pa (5)
Orangeburg Mfg Co 375 Park Ave New York 22 NY (4)
Perma-Pipe Corp P O Box 525 Middleboro Ky (9)
Pittsburgh Reflector Co Oliver Bldg Mellon Square Pittsburgh 22 Pa (5)
Pittsburgh Standard Conduit Co James St Verona Pa (1-5-6)
Plastiline Inc 1251 N E 48 St (P O Box 2023) Pompano Beach Fla (9)
Republic Steel Corp Steel and Tubes Div 224 E 131 St Cleveland 8 Ohio (5-6)
Reynolds Metals Co Richmond 18 Va (1)
●ROME CABLE DIV OF ALCOA 421 Ridge St Rome NY (1-5-9)—ADV PG 42
Soapstone Duct Co 3985 Beach St Oakland Calif (8)
Southwestern Plastic Pipe Co 5763-NQ Mineral Wells Tex (9)
Stahlin Bros Inc Belding Mich (12)
Steelduct Co Republic Steel Bldg Youngstown Ohio (5)
Taylor Electric Inc 15400 Dale Detroit 23 Mich (9)
●TRIANGLE CONDUIT & CABLE CO INC Triangle & Jersey Aves New Brunswick NJ (4-5)—ADV PG 3rd Cover
United States Rubber Co Naugatuck Chemical Div 946K Elm St Naugatuck Conn (9)
Walker Brothers P O Box 33 Conshohocken Pa (1-5)
Western Plastics Corp 1515 W Second St Hastings Neb (9)
●WESTINGHOUSE ELECTRIC SUPPLY CO 3 Gateway Center (Box 448) Pittsburgh 30 Pa (5)—ADV PG 2nd Cover
Wheatland Electric Products Co 500 Logan St Carnegie Pa (1-5-9)
●WIREMOLD CO Hartford 10 Conn (11)—ADV PG 4
Youngstown Sheet and Tube Co P O Box 900 Youngstown 1 Ohio (5-10)

7E. CONDUIT & EMT FITTINGS

1. **Connectors**
2. **Bushings, couplings & locknuts**
3. **Bushing adapters**
4. **Bodies & covers**
5. **Elbows & goosenecks**
6. **Pulling elbows & adapters**
7. **Expansion fittings**
8. **Gaskets**
9. **Hangers, straps, clamps & supports**
10. **Markers**
11. **Nipples & running thread**
12. **Seals, sealing plugs & compound**
13. **Service entrance masts, heads & fittings**
14. **Thread guards**
15. **Conduit ventilators**
16. **Deflection fittings**
17. **Enlargers**
18. **Plastic fittings**
19. **Flexible metallic conduit fittings**
20. **Aluminum fittings**
21. **Liquid-tight flexible conduit fittings**
22. **EMT fittings**
23. **Insulating bushings**
24. **Insulated bushings**
25. **Grounding bushings**

Accessories used to join, seal or terminate conduit and electric metallic tubing. See also "Boxes" in index.

Acme Mfg & Gasket Co 738 N 41 St Phila 4 Pa (8)
Adalet Mfg Co 14300 Lorain Ave Cleveland 11 Ohio (2-7-9-12-13)
●ALL-STEEL EQUIPMENT CO INC Aurora Ill (1-2-13)—ADV PG 117
Allen-Stevens Conduit Fittings Corp 33-35 62nd St Woodside 77 NY (1-2-3-7-11-13-19)
Allmetal Engineering Inc 1003 S Date Ave Alhambra Calif (9)
Apex Bolt Products Co 452-458 N Claremont Ave Chicago 12 Ill (9)
Appleton Electric Co 1701-59 Wellington Ave Chicago 13 Ill (1-2-3-4-9-11-12-13)
Arrolet Corp Foot of Bower St Montgomery Pa (2-3-4-8)
Associated Manufacturers & Distributors Corp 5015 S E Haig St Portland 6 Ore (1-11)
Atlantic Conduit Fittings Co 450 Western Ave Boston Mass (1-2-3-4-9-11-12-13-17)
Atlas Metal Industries 259 W 23 St Hialeah Fla (9)
Badger Die Casting Corp 201 W Oklahoma Ave Milwaukee 7 Wis (1)
●BLACKHAWK INDUSTRIES 250 S Main St Dubuque Iowa (1-2-3-4-9-12-13)—ADV PG 88
Bowers Mfg Co Inc 6700 Avaton Blvd Los Angeles 3 Calif (9)
Brady (WH) Co 727 W Glendale Ave Milwaukee 9 Wis (10)
Bridgeport Fittings Inc 209 Center St Bridgeport 2 Conn (1 thru 6-8-9-13)
●BRIEGEL METHOD TOOL CO 104 N E First St Galva Ill (1-2)—ADV PG 100
Brown Company 150 Causeway St Boston 14 Mass (1-5-17)
Buchanan Electrical Products Corp 434 US Route 22 Hillside NJ (2)
Burndy Corp Norwalk Conn (1)
Clifton Conduit Co 3300 Eastbourne Ave Baltimore 24 Md (2-5-11)
Conduit Fittings Corp 6400 W 66th St Chicago 38 Ill (1-2-5-9-11-13)
Conduit Nipple Mfg Co 1455 Spring Garden Ave Pittsburgh 12 Pa (2-5-11)
●CONDUIT PIPE PRODUCTS CO 157 W Fulton St Columbus 16 Ohio (2-5-11-20)—ADV PG 96
Consolidated Pipe Co. of America 1066 Home Ave Akron Ohio (18)
Crescent Plastics Inc 955 Diamond Ave Evansville 7 Ind (18)
Crouse-Hinds Co Syracuse 1 NY (1 thru 9-12-13)
Diamond Expansion Bolt Co Inc Garwood NJ (9)
Dolco Mfg Co 2350 Curry St Long Beach 5 Calif (13)
Duro Fittings Co 2210 S Davie Ave Los Angeles 22 Calif (1-2-4-5-9-11-12-13-19)
Earl Electric Mfg Corp 35-20 Borden Ave Long Island City NY (1-2-9)
●EFFICIENCY ELECTRIC & MFG CO Park Ave Ext P O Box 30 East Palestine Ohio (9)—ADV PG 120-122
Electric Tube Products 74-16 Grand Ave Maspeth NY (1-2-11)
Electrical Fittings Corp 37-50 57th St Woodside 77 NY (1-2-4-5-8-9-11-12-13-19-21)
Electroline Mfg Co 2622 E 51st St Cleveland 4 Ohio (1-2)

Elliott Electric Mfg Corp 50-30 98th St Corona 68 NY (1 thru 9-11-12-13-14)
Elliott Electric Products Co 1513 Olmstead Ave New York 62 NY (1-9-11-12-13-14)
Erico Products Inc 2070 E 61 Pl Cleveland 3 Ohio (9)
Fastway Fasteners Inc 1676 E 28 St Lorain Ohio (9)
●FULLMAN MFG CO 1209-1215 Jefferson St Latrobe Pa (9)—ADV PG 128
Gateway Engineering Co 3233 W Grand Ave Chicago 51 Ill (9)
Gedney Electric Co Americas Bldg Radio City NY 20 NY (1 thru 6-8-9-11-12-13-14)
●GENERAL ELECTRIC SUPPLY CO 1260 Boston Ave Bridgeport Conn (1 thru 17)—ADV PG 84-85
General Steel Fittings Co 1321 21st St Racine Wis (2-11)
Gibbons Metal Products 730 Gibbons St Los Angeles 31 Calif (1-2-5-9-11-12)
●GRAYBAR ELECTRIC CO INC 420 Lexington Ave NY 17 NY (1 thru 14)—ADV PG 2
Greene (R H) Inc 1201 24th St Oakland 7 Calif (2-9-12)
Grinnell Co Inc 260 W Exchange St Providence 2 RI (9)
Halex Die Casting Co 8640 Bessemer Cleveland 27 Ohio (1-2)
Hall (William) Co Canal Bank Windsor Locks Conn (9)
Holub Industries Inc 442 Elm St Sycamore Ill (9)
●IDEAL INDUSTRIES INC 5136 Park Ave Sycamore Ill (5-6-13)—ADV PG 103
Johns-Manville 22 E 40 St New York 16 NY (12)
Jordan Industries Inc 3030 N W 75 St Miami 47 Fla (12-14)
Kaiser Aluminum & Chemical Sales Inc Kaiser Center 300 Lakeside Dr Oakland 12 Calif (5)
Kees (F D) Mfg Co 700 Park Ave Beatrice Neb (2)
●KILLARK ELECTRIC MFG CO 3940 Easton Ave St Louis 13 Mo (1 thru 5-8-12-13-17)—ADV PG 78-79
Kondu Corp 1040 W 12 St Erie Pa (1-2-4-5)
Korns (C C) Co P O Box 483 Johnstown Pa (9)
Kraloy/Chemtrol Co Electrical Conduit Div 402 W Central Ave Santa Ana Calif (18)
Leibfried (C H) Mfg Corp 95-101 Guernsey St Brooklyn 22 NY (9)
Line Material Industries McGraw-Edison Co 700 W Michigan St Milwaukee Wis (5-11-12)
Lint (Clyde W) 2323 W 18 St Chicago 8 Ill (9-12-13)
M & T Welding Products Corp 703 37th Ave Oakland Calif (13)
●M & W ELECTRIC MFG CO INC S Walnut St (P O Box 87) East Palestine Ohio (1-9-12-13)—ADV PG 129
Madison Equipment Co 5405 Detroit Ave Cleveland 2 Ohio (9)
Marco Industries 207 S Helena St Anaheim Calif (2)
Mark (Clayton) & Co 1900 Dempster St Evanston Ill (2-5)
●MASON (L E) CO 98 Business St (Hyde Park) Boston 36 Mass (4-5-8-13)—ADV PG 121
●McCAFFREY MFG & SUPPLY CO 1840 W 14 St Chicago 8 Ill (13)—ADV PG 122
McKinley (Ben P) Co 522 S Clinton St Chicago 7 Ill (2)
Merwin Mfg Co 19th & German Sts Erie Pa (9)
Metalectrics Inc 627 Greenwich St New York 14 NY (1 thru 5-9-11-12-13-17)
Metro Casting Co Inc 47 Grattan St Brooklyn 37 NY (1-2)
Midwest Electric Mfg Co 1639 Walnut St Chicago 12 Ill (2-5-9-11-13)
●MINERALLAC ELECTRIC CO 25 N Peoria St Chicago 7 Ill (9-12)—ADV PG 108
●MISENER MFG CO INC 202-208 Walton St Syracuse 2 NY (12)—ADV PG 124
Mult-A-Frame Corp 6401 Epworth Blvd Detroit 10 Mich (9)
Myers Electric Products Inc 3019 S Vail Ave Los Angeles 22 Calif (1)
National Electric Div H K Porter Co Inc Porter Bldg Pittsburgh 19 Pa (1-2-5)
National Supply Div Armco Steel Corp Two Gateway Center (P O Box 416) Pittsburgh 30 Pa (2-5)
●O Z ELECTRICAL MFG CO INC 262 Bond St Brooklyn 17 NY (2-7-12)—ADV PG 107
PLM Products Inc 3871 W 150 St Cleveland 11 Ohio (1-2-15)
●PAINE CO 6 Westgate Rd Addison Ill (9)—ADV PG 94
Pipe Couplings Mfrs Inc P O Box 488 Martins Ferry Ohio (2-5-11)
Pittsburgh Reflector Co Oliver Bldg Mellon Square Pittsburgh 22 Pa (9)
Pittsburgh Standard Conduit Co James St Verona Pa (2-5-11-21)
Plastiline Inc 1251 N E 48 St (P O Box 2023) Pompano Beach Fla (14)
Porcelain Products Co 224 N Patterson St Carey Ohio (13)
Pyle-National Co 1344 N Kostner Ave Chicago 51 Ill (1-2-3-4-5-9-12-13)
Ramco Mfg Co 540 Westfield Ave W Roselle Park NJ (9)
Rattan Mfg Co 10 Wall St (P O Box 1745) New Haven 7 Conn (1-2-5-9-11-13-22-23-24-25)
Raybestos-Manhattan Inc 61 Willett St Passaic NJ (8)
Red Seal Electric Co 10307 Detroit Ave Cleveland 2 Ohio (2-12)
Republic Steel Corp Steel and Tubes Div 224 E 131 St Cleveland 8 Ohio (2-5)
Reynolds Metals Co Richmond 18 Va (2)
Richards (J R) Co P O Box 482 Carnegie Pa (1-2-9-11-12-13)
Rodale Mfg Co Inc 6th & Minor Sts Emmaus Pa (2)
Roller (Wm G) Inc 159 Liberty Ave Mineola NY (1-2-11-12-13)
Rusgreen Mfg Co 14262 Birwood Ave Detroit 38 Mich (9)
Russell & Stoll Co Inc 125 Barclay St NY 7 NY (5-12)
Sloane Mfg Co 7606 N Clybourn Ave Sun Valley Calif (18)
So-Cal Electro Products Inc 4423 W Jefferson Blvd Los Angeles 16 Calif (1)
●SPRING CITY ELECTRICAL MFG CO Spring City 85 Pa (2-7-16-18)—ADV PG 114-116
●STEEL CITY ELECTRIC CO 1207 Columbus Ave Pittsburgh 33 Pa (1-2-3-6-9-13)—ADV PG 104
Steel Electric Products Co Inc 5602 18th Ave Brooklyn 4 NY (1 thru 6-8-9-11-12-13-17)
Steelduct Co Republic Steel Bldg Youngstown Ohio (2-5-11)
TA Mfg Corp 4607 Alger St Los Angeles 39 Calif (9)
Thepitt Mfg Co Gregg & Hammond Sts Carnegie Pa (2-3-9-11-12-13)
●THIEL TOOL & ENGINEERING CO 1417 N Market St St Louis 6 Mo (9)—ADV PG 127
Thompson Mfg Co 611 Stevens St Geneva Ill (9)
Tomic Sales & Engineering Co 20000 Sherwood Ave Detroit 34 Mich (1-2-19)
Union Insulating Co Inc Box 351 Parkersburg W Va (2)
Unistrut Products Co 933 Washington Blvd Chicago 7 Ill (9)
Utility Service Co Inc 1620 13th St (P O Box 102) Racine Wis (13)
V V Fitting Co P O Box 1253 Merchantville NJ (2-7-9-13)
Victor Specialties Inc 775 Main St New Rochelle NY (9)
Wagner Malleable Products Co 222 W Adams St Chicago 6 Ill (4)
Walker Brothers End St Conshohocken Pa (2-5)
●WEAVER (J A) CO 2110 Howard St St Louis 6 Mo (1-2-5-9-13)—ADV PG 126
●WESTINGHOUSE ELECTRIC SUPPLY CO 3 Gateway Center (Box 448) Pittsburgh 30 Pa (1 thru 5-7 thru 14)—ADV PG 2nd cover
Wheatland Electric Products Co 500 Logan St Carnegie Pa (18)
Yorkville Metal Products Co 627 Greenwich St New York 14 NY (2-9-11-12-17)
Youngstown Sheet and Tube Co P O Box 900 Youngstown 1 Ohio (2-5)

7F. ELECTRICAL METALLIC TUBING

1. Steel
2. Steel, plastic coated
3. Aluminum

Lightweight conduit; frequently called "EMT" or "Thinwall."

Aluminum Co of America 1501 Alcoa Bldg Pittsburgh 19 Pa (3)
Circle Wire & Cable Corp 5500 Maspeth Ave Maspeth NY (1)
Clifton Conduit Co 3300 Eastbourne Ave Baltimore 24 Md (1)
Columbia Cable & Electric Corp 255 Chestnut St Brooklyn 8 NY (1)
General Electric Co Chemical & Metallurgical Div Conduit Products Dept 980 Warren Ave Niles Ohio (1-2)
●GENERAL ELECTRIC SUPPLY CO 1260 Boston Ave Bridgeport Conn (1-2-3)—ADV PG 84-85
Laclede Steel Co Arcade Bldg St Louis 1 Mo (1)
Mark (Clayton) & Co 1900 Dempster St Evanston Ill (1)
●NATIONAL ELECTRIC DIV H K PORTER CO INC Porter Bldg Pittsburgh 19 Pa—ADV PG 97-98
National Supply Div Armco Steel Corp Two Gateway Center (P O Box 416) Pittsburgh 30 Pa (1)
Nikoh Tube Co 5000 S Whipple St Chicago 32 Ill (1)
Pittsburgh Standard Conduit Co James St Verona Pa (1)
Republic Steel Corp Steel and Tubes Div 224 E 131 St Cleveland 8 Ohio (1-2)
●ROME CABLE DIV OF ALCOA 421 Ridge St Rome NY (1-3)—ADV PG 42
Steelduct Co Republic Steel Bldg Youngstown Ohio (1)
●TRIANGLE CONDUIT & CABLE CO INC Triangle & Jersey Aves New Brunswick NJ (1)—ADV PG 3rd cover
Walker Brothers P O Box 33 Conshohocken Pa (1)
Wheatland Electric Products Co 500 Logan St Carnegie Pa (1)
Youngstown Sheet and Tube Co P O Box 900 Youngstown 1 Ohio (1)

7G. FLEXIBLE METALLIC CONDUIT

1. Standard
2. Liquid-tight

Spirally wound steel strip, interlocked to provide flexible enclosure for conductors.

American Flexible Conduit Co Inc 969 Shawmut Ave New Bedford Mass (1-2)
American Metal Moulding Co 146 Coit St Irvington NJ (1-2)
●ANACONDA METAL HOSE DIV ANACONDA AMERICAN BRASS CO P O Box 791 Waterbury 20 Conn (1-2)—ADV PG 1
Clifton Conduit Co 3300 Eastbourne Ave Baltimore 24 Md (1)
Columbia Cable & Electric Corp 255 Chestnut St Brooklyn 8 NY (1-2)
Electri-Flex Co Roselle Ill (2)
Ettco Wire & Cable Corp 75 Onderdonk Ave Brooklyn 37 NY (1)
Flexonics Corp 1430 S Third Ave Maywood Ill (1-2)
Gedney Electric Co Americas Bldg Radio City NY 20 NY (1-2)
●GRAYBAR ELECTRIC CO INC 420 Lexington Ave NY 17 NY—ADV PG 2
International Metal Hose Co Ashford Ave Bellevue Ohio (1-2)
Kopex Div Gemmer Mfg Co 6400 Mt Elliott Ave Detroit Mich (1)
Marco Industries 207 S Helena St Anaheim Calif (1)
●NATIONAL ELECTRIC DIV H K PORTER CO INC Porter Bldg Pittsburgh 19 Pa—ADV PG 97-98
Thepitt Mfg Co Gregg & Hammond Sts Carnegie Pa (1)
Universal Metal Hose Co 2133 S Kedzie Ave Chicago 23 Ill (1-2)

7H. SURFACE RACEWAY

1. Metallic
2. Non-metallic
3. Ground wire moulding
4. Combination raceway & fixture support
5. Combination raceway & multi-outlet system
6. Overfloor duct

For extension of existing concealed wiring, or for complete installation where concealed wiring is unnecessary or impractical.

Haley (R G) & Co Inc 767 Spitzer Toledo 4 Ohio (3)
Hendrix Wire & Cable Corp Milford NH (3)
●KEYSTONE MFG CO 23328 Sherwood Rd Warren Mich (1)—ADV PG 123
Mitchell Moulding Co 1501 Circle Ave Forest Park Ill (3)
●NATIONAL ELECTRIC DIV H K PORTER CO INC Porter Bldg Pittsburgh 19 Pa (1-5)—ADV PG 97-98
Saylor Electric Products Corp 277 Pierce St Birmingham Mich (2)
●STEEL CITY ELECTRIC CO 1207 Columbus Ave Pittsburgh 33 Pa (1-4)—ADV PG 104
Versabar Corp 14 Whyte St Jersey City NJ (1)
Wadsworth Electric Mfg Co Inc 20-34 W 11th St (Box 272) Covington Ky (1)
●WIREMOLD CO Hartford 10 Conn (1-5-6)—ADV PG 4

7K. UNDERFLOOR DUCT AND DISTRIBUTION SYSTEMS

For concealed passage of conductors beneath floor. For structurally-integrated systems, see "Cellular Floor Raceways."

Cope (T J) Div Rome Cable Corp Third & Walnut Sts Collegeville 5 Pa
Gateway Engineering Co 3233 W Grand Ave Chicago 51 Ill
General Electric Co Chemical & Metallurgical Div Conduit Products Dept 980 Warren Ave Niles Ohio
Howard Electric Co 1950 Ruby St Melrose Park Ill
●NATIONAL ELECTRIC DIV H K PORTER CO INC Porter Bldg Pittsburgh 19 Pa—ADV PG 97-98
National Supply Div Armco Steel Corp Two Gateway Center (P O Box 416) Pittsburgh 30 Pa
Orangeburg Mfg Co 375 Park Ave New York 22 NY
Square D Co Executive Plaza Park Ridge Ill
Walker Brothers P O Box 33 Conshohocken Pa
Wheatland Electric Products Co 500 Logan St Carnegie Pa

7L. WIREWAY

Covered troughs for continuous enclosure of conductors.

Alwalt Mfg Co Inc 1706 Lapham Dr (P O Box 1171) Modesto Calif
B & C Metal Stamping Co P O Box 2506 Atlanta Ga
Columbia Metal Box Co 260 E 143 St NY 51 NY
Eliza Metal Products Co Box 408 Bridgeville Pa
Federal Pacific Electric Co 50 Paris St Newark 5 NJ
General Electric Co Distribution Assemblies Dept 41 Woodford Ave Plainville Conn
General Metals Inc 858 Goldsboro Greensboro NC
Gibbons Metal Products 730 Gibbons St Los Angeles 31 Calif
●HOFFMAN ENGINEERING CORP 1050 Tyler St Anoka Minn—ADV PG 102-118
●HUENEFELD CO ENGINEERED PRODUCTS DIV 2701 Spring Grove Ave Cincinnati 25 Ohio—ADV PG 113
●KEYSTONE MFG CO 23328 Sherwood Rd Warren Mich—ADV PG 123
Mecod Metal Box & Panel Mfg Co Inc 2522 W Huntington St Phila 32 Pa
Metropolitan Electric Mfg Co 2250 Steinway St Long Island City 5 NY
National Electric Div H K Porter Co Inc Porter Bldg Pittsburgh 19 Pa
●P-W INDUSTRIES INC 11200 Roosevelt Blvd Philadelphia 15 Pa—ADV PG 112
Power-Strut Div Van Huffel Products Inc Dietz Rd Warren Ohio
Queen Products Co Inc Thirteenth & Rowan Sts Louisville 3 Ky
Square D Co Executive Plaza Park Ridge Ill
Taylor Electric Inc 15400 Dale Detroit 23 Mich

TECHNICAL LITERATURE

To obtain the following literature, enter the appropriate Code Numbers* on the Free Information cards elsewhere in this issue.

*Code No.	Description, Pages Catalog No. & Mfr.
7-1	Aluminum Unilets; 16p; Cat. No. AL 60 (Appleton)
7-2	Headerduct System; 12p; Cat. No. 492 (Cope)
7-3	Underfloor Distribution System; 19p; Cat. 517 (Cope)
7-4	Wireways, Cabinets & Meter Sockets; 52p; Cat. No. 9 (Circle A-W)
7-5	Electrical Fittings; 58p; Cat. No. F960 (Electrical Fittings)
7-6	Plug-in Busway; 24p; Cat. No. GEA-6173 (GE)
7-7	Lighting-type Busway; 12p; Cat. No. GEA-6170 (GE)
7-8	Plug-in Busway; 12p; Cat. No. GEA-6172E (GE)
7-9	Wireways and Enclosures; 15 p; Cat. No. 159-D (Keystone)
7-10	Conduit Supports; 28p (Minerallac)
7-11	Fittings & Lighting Equipment; 32p; Cat. No. 60 (Pyle-National)
7-12	Steel Conduit; 11p; Cat. No. RCP-9001 (Rome)
7-13	Headerduct; 8p (Wheatland)
7-14	Underfloor Duct; 12p (Wheatland)
7-15	Conduit; 8p (Wheatland)
7-16	Cast Aluminum Conduit Fittings; 12p; Schedule 5 (Mason)
7-17	Permanently PVC-Coated Rigid Conduit Systems; 8p; Cat. No. PB-101 (Pittsburgh Standard)

SECTION 8. MOTORS AND GENERATORS

For flexible reference, motors are listed in four classifications: size, design, enclosure, and application.

8A. MOTORS—SIZE

1. Integral horsepower
2. Fractional horsepower
3. Sub-fractional (miniature)

Acro Switch Div Robertshaw-Fulton Controls Co 2040 E Main St Columbus 16 Ohio (3)
Alliance Mfg Co Inc Lake Park Blvd Alliance Ohio (3)
Allis (Louis) Co 427 East Stewart St Milwaukee 1 Wis (1)
●ALLIS-CHALMERS MFG CO 930 S 70th St Milwaukee 1 Wis (1)—ADV PG 74-75
American Electronics Inc 655 West Washington Blvd Los Angeles 15 Calif (2-3)
Baldor Electric Co 4353 Duncan Ave St Louis 10 Mo (1-2)
Barber-Colman Co P O Drawer 99 Rockford Ill (2)
Bodine Electric Co 2500 W Bradley Pl Chicago 18 Ill (2-3)
Bogue Electric Mfg Co 52 Iowa Ave Paterson 3 NJ (1-2)
Bristol Motor Div Vocaline Co of America Inc Coulter St Old Saybrook Conn (3)
Brook Motor Corp 3302-4 W Peterson Ave Chicago 45 Ill (1-2)
Carter Motor Co 2711 W George St Chicago 18 Ill (2)
Century Electric Co 18th & Pine Sts St Louis 3 Mo (1-2)
Chandeysson Electric Co 4084 Bingham Ave St Louis 16 Mo (1)
Cleveland Electric Motor Co 5213 Chester Ave Cleveland 3 Ohio (1-2)
Continental Electric Co Inc 325 Ferry St Newark 5 NJ (1)
Cramer Controls Corp Main St Centerbrook Conn (3)
Cyclo-Freez Corp 6318 Cambridge Minneapolis 16 Minn (2)
Dalmotor Co 1375 Clay St Santa Clara Calif (2-3)
Dayton Electric Mfg Co 126 S Oakley Blvd Chicago 12 Ill (1-2)
Delco Products Div General Motors Corp 329 E 1st St Dayton 1 Ohio (1-2-3)
Dumore Co 1300 17th St Racine Wis (2)
Eicor Div F L Jacobs Co 4235 W North Ave Chicago 39 Ill (2-3)
Electra Motors Inc 1110 N Lemon St Anaheim Calif (1-2)
Electric Indicator Co Inc Camp Ave Springdale Conn (2-3)
Electric Machinery Mfg Co 800 Central Ave Minneapolis 13 Minn (1)
Electric Motors & Specialties Inc King & Hamsher Sts Garrett Ind (2)
Electro Dynamic Div General Dynamics Corp 163 Ave A Bayonne NJ (1-2)
Elliott Co Jeannette Pa (1)
Emerson Electric Mfg Co 8100 Florissant Ave St Louis 36 Mo (1-2)
Fairbanks Morse & Co Electrical Div 303 N Henderson Freeport Ill (1-2)
Fasco Industries Inc Davis & Toppin Sts Rochester 2 NY (2)
Franklin Electric Co Inc 400 E Spring St Bluffton Ind (1-2)
General Electric Co Apparatus Sales Schenectady 5 NY (1-2-3)
●GENERAL ELECTRIC SUPPLY CO 1260 Boston Ave Bridgeport Conn (1-2-3)—ADV PG 84-85
Gleason-Avery Inc 45 Aurelius Ave Auburn NY (3)
Globe Industries Inc 1784 Stanley Ave Dayton 4 Ohio (2-3)
Hansen Mfg Co Inc RR #1 Princeton Ind (3)
Harnischfeger Corp 4400 W National Ave Milwaukee 46 Wis (1)
Haydon (A W) Co 232 N Elm St Waterbury Conn (3)
Haydon Div General Time Corp 245 E Elm St Torrington Conn (3)
Heinze Electric Co 685 Lawrence St Lowell Mass (3)
Hertner Electric Co 12690 Elmwood Ave Cleveland 11 Ohio (1-2-3)
Holtzer-Cabot Div National Pneumatic Co Inc 125 Amory St Boston 19 Mass (2-3)
Howard Industries Inc 1760 State St Racine Wis (2-3)
Howell Electric Motors Co 409 N Roosevelt Howell Mich (1-2)
IMC Magnetics Corp 570 Main St Westbury NY (2-3)
Ideal Electric and Mfg Co East First St Mansfield Ohio (1)
Imperial Electric Co 84 Ira Ave Akron 9 Ohio (1-2)
International Register Co 2620 W Washington Blvd Chicago 12 Ill (2)
Jack & Heintz Div Siegler Corp P O Box 6719 Cleveland 1 Ohio (1-2)
Janette Electric Mfg Co Lehigh at Main Sts Morton Grove Ill (1-2-3)
Kingston Conley Inc Plainfield NJ (1-2)
Kurz & Root Sales & Engineering Corp 232 East North Island St Appleton Wis (1)
Leland Electric Co 1501 Webster St Dayton 1 Ohio (1-2)
Lewus Electric Co 1254 W Harrison St Chicago 7 Ill (1-2)
Lima Electric Motor Co Inc Findlay Road Lima Ohio (1-2)
Marathon Electric Mfg Corp Wausau Wisc (1-2)
Marble Electric Corp Gladstone Mich (1)
Master Electric Div Reliance Electric & Engineering Co 24701 Euclid Ave Cleveland Ohio (1-2)
McMillan Mfg Co 310 Broadway St Paul 1 Minn (2)
Motor Specialty Inc 2801-17 Lathrop Ave Racine Wis (2)
Motoresearch Co 1600 Junction Ave Racine Wis (1-2-3)
Newman Electric Motors Inc 357 Wilson Ave Newark 5 NJ (1-2)
Northwestern Electric Co 1750 N Springfield Ave Chicago 47 Ill (1-2)
Peerless Electric Div H K Porter Co Inc 1401 W Market St Warren Ohio (1-2)
Rae Motor Corp Box 518 McHenry Ill (2-3)
Redmond Co Inc 201 Monroe St Owosso Mich (2)
Reliance Electric & Engineering Co 24701 Euclid Ave Cleveland 17 Ohio (1-2)
Reuland Electric Co 3001 W Mission Rd Alhambra Calif (1-2)
Reynolds Electric Co 3000 River Rd River Grove Ill (2)
Robbins & Myers Inc 1345 Lagonda Ave Springfield Ohio (1-2-3)
Safety Electrical Equipment Corp 1187 Dixwell Ave New Haven Conn (1)
Sangamo Electric Co 11th & Converse Springfield Ill (3)
Shelby Electric Inc East US Highway #421 Shelbyville Ind (1-2)
Small Motors Inc 2076 Elston Ave Chicago 14 Ill (2-3)
Standard Electric Div Standard Dayton Corp P O Box 1001 Dayton 1 Ohio (1-2)
Sterling Electric Motors Inc 5401 Telegroph Rd Los Angeles 22 Calif (1-2)
System Analyzer Corp 700 W State St Nokomis Ill (1)
Thermador Electrical Mfg Co 5119 District Blvd Los Angeles 22 Calif (2)
United Electric Machinery Co 8545 W 64 Pl Arvada Colo (1-2)
U S Electrical Motors Inc 200 E Slauson Ave Los Angeles 54 Calif (1-2)
Universal Electric Co 300 E Main St Owosso Mich (2-3)
UPPCO 900 S Desplaines St Chicago 7 Ill (2)
Wagner Electric Corp 6400 Plymouth Ave St Louis 33 Mo (1-2)
Western Gear Corp Electro Products Div 132 W Colorado St Pasadena 1 Calif (2-3)
Westinghouse Electric Corp P O Box 2278 Pittsburgh 30 Pa (1-2)

●WESTINGHOUSE ELECTRIC SUPPLY CO 3 Gateway Center (Box 448) Pittsburgh 30 Pa (1-2)—ADV PG 2nd cover

8B. MOTORS—DESIGN

1. **Direct current**
2. **Polyphase induction**
3. **Polyphase synchronous**
4. **Single phase**
5. **High frequency**
6. **Wound rotor**

Allis (Louis) Co 427 East Stewart St Milwaukee 1 Wis (1 thru 4)
●ALLIS-CHALMERS MFG CO 930 S 70th St Milwaukee 1 Wis (1-2-3)—ADV PG 74-75
American Electronics Inc 655 West Washington Blvd Los Angeles 15 Calif (1 thru 4)
Baldor Electric Co 4353 Duncan Ave St Louis 10 Mo (1-2-4)
Barber-Colman Co P O Drawer 99 Rockford Ill (1-4)
Bodine Electric Co 2500 W Bradley Pl Chicago 18 Ill (1-2-3-4)
Bogue Electric Mfg Co 52 Iowa Ave Paterson 3 NJ (1-2-4)
Brook Motor Corp 3302-4 W Peterson Ave Chicago 45 Ill (4)
Century Electric Co 18th & Pine Sts St Louis 3 Mo (1-2-4)
Chandeysson Electric Co 4084 Bingham Ave St Louis 16 Mo (1-2-3)
Cleveland Electric Motor Co 5213 Chester Ave Cleveland 3 Ohio (2)
Columbia Electric Mfg Co 4519 Hamilton Ave Cleveland 14 Ohio (3)
Continental Electric Co 1234 S Prairie Ave (P O Box 895) Hawthorne Calif (5)
Continental Electric Co Inc 325 Ferry St Newark 5 NJ (1-2-3)
Cyclo-Freez Corp 6318 Cambridge Minneapolis 16 Minn (4)
Dalmotor Co 1375 Clay St Santa Clara Calif (1-4)
Dayton Electric Mfg Co 126 S Oakley Blvd Chicago 12 Ill (2-4)
Delco Products Div General Motors Corp 329 E 1st St Dayton 1 Ohio (1 thru 4)
Dumore Co 1300 17th St Racine Wis (4)
Eicor Div F L Jacobs Co 4235 W North Ave Chicago 39 Ill (1-4)
Electra Motors Inc 1110 N Lemon St Anaheim Calif (2-3-4)
Electric Indicator Co Inc Camp Ave Springdale Conn (1 thru 4)
Electric Machinery Mfg Co 800 Central Ave Minneapolis 13 Minn (2-3)
Electric Motors & Specialties Inc King & Hamsher Sts Garrett Ind (4)
Electric Products Co 1725 Clarkstone Rd Cleveland 12 Ohio (1-2-3)
Electric Specialty Co 211 South St Stamford Conn (1)
Electro Dynamic Div General Dynamics Corp 163 Ave A Bayonne NJ (1-2)
Elliott Co Jeannette Pa (1-2-3)
Emerson Electric Mfg Co 8100 Florissant Ave St Louis 36 Mo (4)
Fairbanks Morse & Co Electrical Div 303 N Henderson Freeport Ill (1-2-3-4)
Fasco Industries Inc Davis & Toppin Sts Rochester 2 NY (4)
Franklin Electric Co Inc 400 E Spring St Bluffton Ind (1-2-4)
General Electric Co Apparatus Sales Schenectady 5 NY (1 thru 4)
Gleason-Avery Inc 45 Aurelius Ave Auburn NY (4)
Globe Industries Inc 1784 Stanley Ave Dayton 4 Ohio (1 thru 5)
●GRAYBAR ELECTRIC CO INC 420 Lexington Ave NY 17 NY (1 thru 4)—ADV PG 2
Haft & Sons Inc 950 Kent Ave Brooklyn 5 NY (4)
Hansen Mfg Co Inc RR #1 Princeton Ind (1-4)
Haydon (A W) Co 232 N Elm St Waterbury Conn (1-4)
Heinze Electric Co 685 Lawrence St Lowell Mass (1-4)
Hertner Electric Co 12690 Elmwood Ave Cleveland 11 Ohio (1-2-4)
Holtzer-Cabot Div National Pneumatic Co Inc 125 Amory St Boston 19 Mass (1 thru 4)
Howard Industries Inc 1760 State St Racine Wis (1 thru 4)
Howell Electric Motors Co 409 N Roosevelt Howell Mich (2-4)
IMC Magnetics Corp 570 Main St Westbury NY (1)
Ideal Electric and Mfg Co East First St Mansfield Ohio (1-2-3)
Jack & Heintz Div Siegler Corp P O Box 6719 Cleveland 1 Ohio (2-4)
Kingston Conley Inc Plainfield NJ (2-4)
Kurz & Root Sales & Engineering Corp 232 East North Island St Appleton Wis (1 thru 4)
Leland Electric Co 1501 Webster St Dayton 1 Ohio (1-2-4)
Lewus Electric Co 1254 W Harrison St Chicago 7 Ill (4)
Lima Electric Motor Co Inc Findlay Road Lima Ohio (2-4)
Lincoln Electric Co 22801 St Clair Ave Cleveland 17 Ohio (2)
Marathon Electric Mfg Corp Wausau Wisc (1 thru 4)
Marble Electric Corp Gladstone Mich (1-2)
Master Electric Div Reliance Electric & Engineering Co 24701 Euclid Ave Cleveland Ohio (1 thru 4)
McMillan Mfg Co 310 Broadway St Paul 1 Minn (4)
Motoresearch Co 1600 Junction Ave Racine Wis (2-4)
Newman Electric Motors Inc 357 Wilson Ave Newark 5 NJ (2-3-4)
Northwestern Electric Co 1750 N Springfield Ave Chicago 47 Ill (1-2-4)
Peerless Electric Div H K Porter Co Inc 1401 W Market St Warren Ohio (1-2-3-4)
Rae Motor Corp Box 518 McHenry Ill (1)
Redmond Co Inc 201 Monroe St Owosso Mich (1)
Reliance Electric & Engineering Co 24701 Euclid Ave Cleveland 17 Ohio (1-2)
Reuland Electric Co 3001 W Mission Rd Alhambra Calif (2-3-4)
Reynolds Electric Co 3000 River Rd River Grove Ill (2-4)
Robbins & Myers Inc 1345 Lagonda Ave Springfield Ohio (1-2-3-4)
Safety Electrical Equipment Corp 1187 Dixwell Ave New Haven Conn (1-2)
Shelby Electric Inc East US Highway #421 Shelbyville Ind (2-3-4)
Small Motors Inc 2076 Elston Ave Chicago 14 Ill (1-4)
Standard Electric Div Standard Dayton Corp P O Box 1001 Dayton 1 Ohio (2-4)
Sterling Electric Motors Inc 5401 Telegraph Rd Los Angeles 22 Calif (2-3-4)
Superior Electric Co 83 Laurel St Bristol Conn (4)
System Analyzer Corp 700 W State St Nokomis Ill (2-4)
Technical Electronics Co 4060 Ince Blvd Culver City Calif (4)
United Electric Machinery Co 8545 W 64 Pl Arvada Colo (4)
United Electric Motor Co 178 Centre St NY 13 NY (3)
U S Electrical Motors Inc 200 E Slauson Ave Los Angeles 54 Calif (2)
Universal Electric Co 300 E Main St Owosso Mich (1-4)
Wagner Electric Corp 6400 Plymouth Ave St Louis 33 Mo (2-3-4)
Western Gear Corp Electro Products Div 132 W Colorado St Pasadena 1 Calif (1 thru 4)
Westinghouse Electric Corp P O Box 2278 Pittsburgh 30 Pa (1-2-3-4)
●WESTINGHOUSE ELECTRIC SUPPLY CO 3 Gateway Center (Box 448) Pittsburgh 30 Pa (1-2-3-4)—ADV PG 2nd Cover

8C. MOTORS—ENCLOSURE

1. **Drip-proof**
2. **Explosion-proof**
3. **Splash-proof**
4. **Weatherproof**
5. **Hermetic**
6. **Submersible**
7. **Totally enclosed**

Alliance Mfg Co Inc Lake Park Blvd Alliance Ohio (4)
Allis (Louis) Co 427 East Stewart St Milwaukee 1 Wis (1 thru 7)
●ALLIS-CHALMERS MFG CO 930 S 70th St Milwaukee 1 Wis (1-2-3-4-7)—ADV PG 74-75
Baldor Electric Co 4353 Duncan Ave St Louis 10 Mo (1-2-3-4-7)
Bodine Electric Co 2500 W Bradley Pl Chicago 18 Ill (7)
Bogue Electric Mfg Co 52 Iowa Ave Paterson 3 NJ (1-2-3-4-6-7)
Brook Motor Corp 3302-4 W Peterson Ave Chicago 45 Ill (1-3-4-7)
Century Electric Co 18th & Pine Sts St Louis 3 Mo (1-2-3-4-5-6-7)
Chandeysson Electric Co 4084 Bingham Ave St Louis 16 Mo (1-3-4)
Continental Electric Co Inc 325 Ferry St Newark 5 NJ (1-2-3-7)
Cyclo-Freez Corp 6318 Cambridge Minneapolis 16 Minn (1-7)
Dalmotor Co 1375 Clay St Santa Clara Calif (7)
Dayton Electric Mfg Co 126 S Oakley Blvd Chicago 12 Ill (1-2-3-7)
Delco Products Div General Motors Corp 329 E 1st St Dayton 1 Ohio (1-2-5-7)
Eicor Div F L Jacobs Co 4235 W North Ave Chicago 39 Ill (1-2-3-4-7)
Electra Motors Inc 1110 N Lemon St Anaheim Calif (1-2-3-4-7)
Electric Indicator Co Inc Camp Ave Springdale Conn (1-3-4-6-7)
Electric Machinery Mfg Co 800 Central Ave Minneapolis 13 Minn (1-3-4-7)
Electric Motors & Specialties Inc King & Hamsher Sts Garrett Ind (4-7)
Electro Dynamic Div General Dynamics Corp 163 Ave A Bayonne NJ (1-2-3-4-6-7)
Elliott Co Jeannette Pa (1-2-3-4-7)
Emerson Electric Mfg Co 8100 Florissant Ave St Louis 36 Mo (1-5)
Fairbanks Morse & Co Electrical Div 303 N Henderson Freeport Ill (1 thru 4-6-7)
Fasco Industries Inc Davis & Toppin Sts Rochester 2 NY (1-2-3-4-6-7)
Franklin Electric Co Inc 400 E Spring St Bluffton Ind (1-2-3-4-6-7)
General Electric Co Apparatus Sales Schenectady 5 NY (1 thru 7)
Globe Industries Inc 1784 Stanley Ave Dayton 4 Ohio (1 thru 7)
Hansen Mfg Co Inc RR #1 Princeton Ind (7)
Haydon (A W) Co 232 N Elm St Waterbury Conn (4)
Hertner Electric Co 12690 Elmwood Ave Cleveland 11 Ohio (1)
Holtzer-Cabot Div National Pneumatic Co Inc 125 Amory St Boston 19 Mass (7)
Howard Industries Inc 1760 State St Racine Wis (7)
Howell Electric Motors Co 409 N Roosevelt Howell Mich (1-2-3-4-7)
Ideal Electric and Mfg Co East First St Mansfield Ohio (1-2-3-4-5-7)
Jack & Heintz Div Siegler Corp P O Box 6719 Cleveland 1 Ohio (1-2-3-6-7)
Kingston Conley Inc Plainfield NJ (1-7)
Kurz & Root Sales & Engineering Corp 232 East North Island St Appleton Wis (1-3-7)
Leland Electric Co 1501 Webster St Dayton 1 Ohio (1-2-6-7)
Lima Electric Motor Co Inc Findlay Road Lima Ohio (1-2-4-7)
Marathon Electric Mfg Corp Wausau Wis (1-2-3-4-7)
Marble Electric Corp Gladstone Mich (2-3-4-7)
Master Electric Div Reliance Electric & Engineering Co 24701 Euclid Ave Cleveland Ohio (1 thru 4-7)
McMillan Mfg Co 310 Broadway St Paul 1 Minn (4-7)
Motoresearch Co 1600 Junction Ave Racine Wis (1-7)
Newman Electric Motors Inc 357 Wilson Ave Newark 5 NJ (1-2-3-4-7)
Northwestern Electric Co 1750 N Springfield Ave Chicago 47 Ill (1-3-7)
Peerless Electric Div H K Porter Co Inc 1401 W Market St Warren Ohio (1-2-3-4-6-7)
Rae Motor Corp Box 518 McHenry Ill (7)
Redmond Co Inc 201 Monroe St Owosso Mich (1-3-7)
Reliance Electric & Engineering Co 24701 Euclid Ave Cleveland 17 Ohio (1 thru 7)
Reuland Electric Co 3001 W Mission Rd Alhambra Calif (1-3-4-7)
Reynolds Electric Co 3000 River Rd River Grove Ill (1-3)
Robbins & Myers Inc 1345 Lagonda Ave Springfield Ohio (1-2-3-4-7)
Safety Electrical Equipment Corp 1187 Dixwell Ave New Haven Conn (1-2-3-4-7)
Shelby Electric Inc East US Highway #421 Shelbyville Ind (1-3-7)
Small Motors Inc 2076 Elston Ave Chicago 14 Ill (1-3-4-7)
Standard Electric Div Standard Dayton Corp P O Box 1001 Dayton 1 Ohio (1-3-4-7)
Sterling Electric Motors Inc 5401 Telegraph Rd Los Angeles 22 Calif (1-2-3-4-7)
Superior Electric Co 83 Laurel St Bristol Conn (2)
System Analyzer Corp 700 W State St Nokomis Ill (1-4-7)
United Electric Machinery Co 8545 W 64 Pl Arvada Colo (1 thru 4)
U S Electrical Motors Inc 200 E Slauson Ave Los Angeles 54 Calif (1-2-3-4-7)
Universal Electric Co 300 E Main St Owosso Mich (1-3-7)
Wagner Electric Corp 6400 Plymouth Ave St Louis 33 Mo (1 thru 7)
Western Gear Corp Electro Products Div 132 W Colorado St Pasadena 1 Calif (1 thru 7)
Westinghouse Electric Corp P O Box 2278 Pittsburgh 30 Pa (1 thru 7)

8D. MOTORS—APPLICATION

1. **Brake**
2. **Gear**
3. **Aircraft**
4. **Automotive**
5. **Railway**
6. **Mining**
7. **Marine**
8. **Timing**
9. **Oil burner**
10. **Elevator**

11. Pump
12. Crane & hoist
13. Power tool
14. Sewing machine
15. Instrument
16. Fan
17. Agitator drive
18. Stepping
19. Textile
20. Cranking
21. Vertical
22. Press
23. Sanitary

Adams Engineering Co 31711 Solon Rd Solon Ohio (2)
Alliance Mfg Co Inc Lake Park Blvd Alliance Ohio (8-11-16)
Allis (Louis) Co 427 E Stewart St Milwaukee 1 Wis (1-2-10-11-12-13-16)
●ALLIS-CHALMERS MFG CO 930 S 70th St Milwaukee 1 Wis (2-7)—ADV PG 74-75
American Electronics Inc 655 West Washington Blvd Los Angeles 15 Calif (1-2-3-15-16)
Atlas Tool and Mfg Co 5147 Natural Bridge Ave St Louis 15 Mo (2)
Baldor Electric Co 4353 Duncan Ave St Louis 10 Mo (7)
Barber-Colman Co P O Drawer 99 Rockford Ill (2-3-15-16)
Bernina Sewing Machine Co 29 W 35 St NY 1 NY (14)
Bodine Electric Co 2500 W Bradley Pl Chicago 18 Ill (8-11-13-14-15)
Bogue Electric Mfg Co 52 Iowa Ave Paterson 3 NJ (3-5-7-11)
Bristol Motor Div Vocaline Co of America Inc Coulter St Old Saybrook Conn (8)
Brook Motor Corp 3302-4 W Peterson Ave Chicago 45 Ill (10-11-12)
Century Electric Co 18th & Pine Sts St Louis 3 Mo (1-2-7)
Cleveland Electric Motor Co 5213 Chester Ave Cleveland 3 Ohio (1-10-11-12-16)
Continental Electric Co Inc 325 Ferry St Newark 5 NJ (10-11-12)
Cramer Controls Corp Main St Centerbrook Conn (8)
Cyclo-Freez Corp 6318 Cambridge Minneapolis 16 Minn (9-11-16)
Dalmotor Co 1375 Clay St Santa Clara Calif (1-2-3-8-16)
Delco Products Div General Motors Corp 329 E 1st St Dayton 1 Ohio (1 thru 7-9-10-16)
Dumore Co 1300 17th St Racine Wis (2)
Eicor Div F L Jacobs Co 4235 W North Ave Chicago 39 Ill (1-3-5-6-7-11-15-16)
Electra Motors Inc 1110 N Lemon St Anaheim Calif (1-2-10-11-12-13-16)
Electric Indicator Co Inc Camp Ave Springdale Conn (1-2-3-5-6-7-8-11-13-15-16)
Electric Machinery Mfg Co 800 Central Ave Minneapolis 13 Minn (6-11-16)
Electric Motors & Specialties Inc King & Hamsher Sts Garrett Ind (16)
Electric Specialty Co 211 South St Stamford Conn (1-3)
Electrical Mfg Co 425 Lake Ave Racine Wis (14)
Electro Dynamic Div General Dynamics Corp 163 Ave A Bayonne NJ (1 thru 15)
Elliott Co Jeannette Pa (2-9-11-12-16)
Fairbanks Morse & Co Electrical Div 303 N Henderson Freeport Ill (1-2-5-6-7-9-10-11-12-16)
Falk Corp Box 492 Milwaukee 1 Wis (2)
Fasco Industries Inc Davis & Toppin Sts Rochester 2 NY (9-11-16)
Franklin Electric Co Inc 400 E Spring St Bluffton Ind (2-11-12-13-16)
General Electric Co Apparatus Sales Schenectady 5 NY (1-2-4-thru 7-9 thru 16)
Gleason-Avery Inc 45 Aurelius Ave Auburn NY (2-8-15)
Globe Industries Inc 1784 Stanley Ave Dayton 4 Ohio (1-2-3-4-6-7-8-11-13 thru 17)
Hansen Mfg Co Inc RR #1 Princeton Ind (8-15)
Harnischfeger Corp 4400 W National Ave Milwaukee 46 Wis (12)
Haydon (A W) Co 232 N Elm St Waterbury Conn (8-15)
Heinze Electric Co 685 Lawrence St Lowell Mass (2-4-14-16)
Holtzer-Cabot Div National Pneumatic Co Inc 125 Amory St Boston 19 Mass (2-8-15)
Howard Industries Inc 1760 State St Racine Wis (2-3-4-5-8-13-14-15-16)
Howell Electric Motors Co 409 N Roosevelt Howell Mich (1-2-10-11-12)
Ideal Electric and Mfg Co East First St Mansfield Ohio (6-7-11-12-16)
International Register Co 2620 W Washington Blvd Chicago 12 Ill (8)
Jack & Heintz Inc 17600 Broadway Cleveland 1 Ohio (11-12-13-14)
Janette Electric Mfg Co Lehigh at Main Sts Morton Grove Ill (2)
Kingston Conley Inc Plainfield NJ (11-12-13-16)
Kurz & Root Sales & Engineering Corp 232 E North Island St Appleton Wis (10)
Ledex Inc 123 Webster St Dayton 2 Ohio (18)
Leece-Neville Co 1374 E 51 St Cleveland 3 Ohio (20)
Leland Electric Co 1501 Webster St Dayton 1 Ohio (1-11-12-13)
Lima Electric Motor Co Inc Findlay Road Lima Ohio (1-2-11-13-16)
Marathon Electric Mfg Corp Wausau Wis (6-7-9-11-13-16)
Marble Electric Corp Gladstone Mich (1-2-6-7-11-12-16)
Master Electric Div Reliance Electric & Engineering Co 24701 Euclid Ave Cleveland Ohio (1-2-7-10-11-12-13-16)
McMillan Mfg Co 310 Broadway St Paul 1 Minn (2-8-9-11-15-16-17)
Minneapolis-Honeywell Regulator Co Industrial Div Wayne & Windrim Aves Phila 44 Pa (15)
Morse Chain Co Borg Warner Corp Ithaca NY (2)
Motor Specialty Inc 2801-17 Lathrop Ave Racine Wis (13-14)
Motoresearch Co 1600 Junction Ave Racine Wis (2-3)
Northwestern Electric Co 1750 N Springfield Ave Chicago 47 Ill (2-3-5-6-7-10-11-12-16)
Peerless Electric Div H K Porter Co Inc 1401 W Market St Warren Ohio (1-6-7-10-11-12-13-16)
Rae Motor Corp Box 518 McHenry Ill (1-2-14)
Redmond Co Inc 201 Monroe St Owosso Mich (7-9-11-13-16)
Reliance Electric & Engineering Co 24701 Euclid Ave Cleveland 17 Ohio (1-2-6-7-10-11-12-13-16-22-23)
Reuland Electric Co 3001 W Mission Rd Alhambra Calif (1-2-9-10-11-12-16)
Reynolds Electric Co 3000 River Rd River Grove Ill (16)
Robbins & Myers Inc 1345 Lagonda Ave Springfield Ohio (9 thru 13-16)
Safety Electrical Equipment Corp 1187 Dixwell Ave New Haven Conn (1-5-7-11-12)
Sangamo Electric Co 11th & Converse Springfield Ill (8)
Shelby Electric Inc East US Highway #421 Shelbyville Ind (1-2-11-12-13-16-17)
Small Motors Inc 2076 Elston Ave Chicago 14 Ill (9-11-16)
Standard Electric Div Standard Dayton Corp P O Box 1001 Dayton 1 Ohio (1-2-10-11-12-13)
Sterling Electric Motors Inc 5401 Telegraph Rd Los Angeles 22 Calif (1-2)
United Electric Machinery Co 8545 W 64 Pl Arvada Colo (1-2)
U S Electrical Motors Inc 200 E Slauson Ave Los Angeles 54 Calif (2-3-10-11-16)
Universal Electric Co 300 E Main St Owosso Mich (9-11-16)
Western Gear Corp Electro Products Div 132 W Colorado St Pasadena 1 Calif (1-2-3-8-11-15-16)
Westinghouse Electric Corp P O Box 2278 Pittsburgh 30 Pa (1 thru 7-9 thru 13-16-17)

8E. GENERATORS

1. Alternating current
2. Direct current
3. High frequency
4. Magnet

For changing mechanical energy to electrical energy; often called "dynamos" or "alternators."

Allis (Louis) Co 427 East Stewart St Milwaukee 1 Wis (1-2)
Allis-Chalmers Mfg Co 930 S 70th St Milwaukee 1 Wis (1-2)
American Electronics Inc 655 West Washington Blvd Los Angeles 15 Calif (1)
Bogue Electric Mfg Co 52 Iowa Ave Paterson 3 NJ (1-2)
Century Electric Co 1806 Pine St St Louis 3 Mo (1-2)
Chandeysson Electric Co 4084 Bingham Ave St Louis 16 Mo (1-2)
Columbia Electric Mfg Co 4519 Hamilton Ave Cleveland 14 Ohio (1-2)
Continental Electric Co Inc 325 Ferry St Newark 5 NJ (1-2)
D & R Ltd 402 E Gutierrez St P O Box 1500 Santa Barbara Calif (1)
Dalmotor Co 1375 Clay St Santa Clara Calif (1-2)
Delco Products Div General Motors Corp 329 E 1st St Dayton 1 Ohio (1-2)
Eicor Div F L Jacobs Co 4235 W North Ave Chicago 39 Ill (1-2)
Electric Indicator Co Inc Camp Ave Springdale Conn (1-2)
Electric Machinery Mfg Co 800 Central Ave Minneapolis 13 Minn (1)
Electric Products Co 1725 Clarkstone Rd Cleveland 12 Ohio (1-2)
Electric Specialty Co 211 South St Stamford Conn (1-2-3)
Electro Dynamic Div General Dynamics Corp 163 Ave A Bayonne NJ (2)
Elliott Co Jeannette Pa (1-2)
Fairbanks Morse & Co Electrical Div 303 N Henderson Freeport Ill (1-2)
Fidelity Electric Co Inc 332 N Arch St Lancaster Pa (1)
General Electric Co Apparatus Sales Schenectady 5 NY (1-2)
Gerator Corp Manassas Va (1-2)
Globe Industries Inc 1784 Stanley Ave Dayton 4 Ohio (1-2-3)
Hertner Electric Co 12690 Elmwood Ave Cleveland 11 Ohio (1-2)
Holtzer-Cabot Div National Pneumatic Co Inc 125 Amory St Boston 19 Mass (1-2)
Homelite Div Textron Inc 67 Riverdale Ave Port Chester NY (1-2)
Ideal Electric and Mfg Co East First St Mansfield Ohio (1-2)
Kato Engineering Co 1442 First Ave Mankato Minn (1)
Katolight Corp First Ave at Chestnut (P O Box 891) Mankato Minn (3)
Kurz & Root Sales & Engineering Corp 232 East North Island St Appleton Wis (1-2)
Leece-Neville Co 1374 E 51 St Cleveland 3 Ohio (1-2)
Leland Electric Co 1501 Webster St Dayton 1 Ohio (1-2)
Marathon Electric Mfg Corp Wausau Wis (1-2)
Marble Electric Corp Gladstone Mich (1-2)
Master Electric Div Reliance Electric & Engineering Co 24701 Euclid Ave Cleveland Ohio (1-2)
Motoresearch Co 1600 Junction Ave Racine Wis (1-2)
Northwestern Electric Co 1750 N Springfield Ave Chicago 47 Ill (1-2)
Onan Div Studebaker-Packard Corp 2515 University Ave S E Minneapolis 14 Minn (1-2)
Peerless Electric Div H K Porter Co Inc 1401 W Market St Warren Ohio (2)
Rae Motor Corp Box 518 McHenry Ill (2)
Robbins & Myers Inc 1345 Lagonda Ave Springfield Ohio (1)
Safety Electrical Equipment Corp 1187 Dixwell Ave New Haven Conn (1-2-3)
Sangamo Electric Co 11th & Converse Springfield Ill (2)
Small Motors Inc 2076 Elston Ave Chicago 14 Ill (1-2)
U S Electric Motor Co Cadiz Ohio (4)
Welduction Corp 19400 W Eight Mile Rd (P O Box 146) Southfield Mich (3)
Western Gear Corp Electro Products Div 132 W Colorado St Pasadena 1 Calif (1-2)
Westinghouse Electric Corp P O Box 2278 Pittsburgh 30 Pa (1-2)
Wincharger Corp E Seventh & Division St Sioux City 2 Iowa (1-2)
Winpower Mfg Co Newton Iowa (1-2)

8F. POWER GENERATING SETS

1. Steam engine powered
2. Steam turbine powered
3. Diesel engine powered
4. Gasoline engine powered
5. Gas turbine powered
6. Mercury turbine powered
7. Balancer sets
8. Motor-driven (M-G sets)

Engine-driven generating plants for providing electricity for power or lighting.

Allis (Louis) Co 427 East Stewart St Milwaukee 1 Wis (8)
Allis-Chalmers Mfg Co 930 S 70th St Milwaukee 1 Wis (2-3-4-7-8)
Bogue Electric Mfg Co 52 Iowa Ave Paterson 3 NJ (3-8)
Caterpillar Tractor Co Industrial Engine Plant Peoria Ill (3-5)
Chandeysson Electric Co 4084 Bingham Ave St Louis 16 Mo (3-4-8)
Columbia Electric Mfg Co 4519 Hamilton Ave Cleveland 14 Ohio (8)
Coppus Engineering Corp 344 Park Ave Worcester 10 Mass (2)
D & R Ltd 402 E. Gutierrez St P O Box 1500 Santa Barbara Calif (2-8)
Dayton Electric Mfg Co 126 S Oakley Blvd Chicago 12 Ill (4)
Detroit Diesel Engine Div General Motors Corp 13400 W Outer Dr Detroit 28 Mich (3)
Eicor Div F L Jacobs Co 4235 W North Ave Chicago 39 Ill (8)
Electric Indicator Co Inc Camp Ave Springdale Conn (8)
Electric Products Co 1725 Clarkstone Rd Cleveland 12 Ohio (8)
Electric Specialty Co 211 South St Stamford Conn (8)
Elliott Co Jeannette Pa (1-2-3-5-8)
Empire Corp 1566 S 83rd St Milwaukee 14 Wis (3-4)
Fairbanks Morse & Co Electrical Div 303 N Henderson Freeport Ill (3-4-8)
GM Diesel 13400 Outer Dr Detroit 28 Mich (3)
General Electric Co Apparatus Sales Schenectady 5 NY (2-3-5 thru 8)
●GRAYBAR ELECTRIC CO INC 420 Lexington Ave NY 17 NY (8)—ADV PG 2

Harnischfeger Corp 4400 W National Ave Milwaukee 46 Wis (3)
Hertner Electric Co 12690 Elmwood Ave Cleveland 11 Ohio (7-8)
Homelite Div Textron Inc 67 Riverdale Ave Port Chester NY (4)
Howard Industries Inc 1760 State St Racine Wis (4)
International Fermont Machinery Co Inc Ramapo NY (3-4-5)
Jeta Inc Yonkers NY (3-4)
Kato Engineering Co 1442 First Ave Mankato Minn (8)
Katolight Corp First Ave at Chestnut (P O Box 891) Mankato Minn (3-4-8)
Kohler Co Kohler Wis (3)
Kurz & Root Sales & Engineering Corp 232 East North Island St Appleton Wis (8)
Leach Corp 18435 Susana Rd Compton Calif (8)
Marble Electric Corp Gladstone Mich (8)
Master Electric Div Reliance Electric & Engineering Co 24701 Euclid Ave Cleveland Ohio (8)
Milwaukee Electric Tool Corp 5368 W State St Milwaukee 8 Wis (4)
Moon Mfg Co 108 N Jefferson St Chicago 6 Ill (2)
Motoresearch Co 1600 Junction Ave Racine Wis (4)
Nordberg Mfg Co 3073 S Chase Ave Milwaukee 1 Wis (3)
Northwestern Electric Co 1750 N Springfield Ave Chicago 47 Ill (8)
Onan Div Studebaker-Packard Corp 2515 University Ave S E Minneapolis 14 Minn (3-4)
Petter Diesel Engine Div Brush Aboe Inc 34-14 58th St Woodside 77 NY (3)
Pioneer Gen-E-Motor Co 5841 W Dickens Ave Chicago 39 Ill (4)
Potter & Rayfield Inc P O Box 1042 Atlanta Ga (7)
Pyle-National Co 1344 N Kostner Ave Chicago 51 Ill (2)
Ready-Power Co 11231 Freud Ave Detroit 14 Mich (3-4)
Reliance Electric & Engineering Co 24701 Euclid Ave Cleveland 17 Ohio (8)
Safety Electrical Equipment Corp 1187 Dixwell Ave New Haven Conn (8)
Thor Power Tool Co 175 N State St Aurora Ill (4)
Tocco Div Ohio Crankshaft Co 3800 Harvard Ave Cleveland 5 Ohio (8)
U S Electric Motor Co Cadiz Ohio (3-4)
United States Motors Corp 102 W Fifth Ave Oshkosh Wis (3-4)
Universal Motor Co 438 Universal Dr Oshkosh Wis (3-4)
Waukesha Motor Co Waukesha Wis (3-4)
Welduction Corp 19400 W Eight Mile Rd (P O Box 146) Southfield Mich (8)
Westinghouse Electric Corp P O Box 2278 Pittsburgh 30 Pa (1-2-5-8)
Wincharger Corp E Seventh & Division St Sioux City 2 Iowa (4)
Winpower Mfg Co Newton Iowa (3-4)
Young Engine Corp P O Box 532 Canton Ohio (4)

8G. DYNAMOTORS

Rotating machine for changing dc power from one voltage to another.

Bogue Electric Mfg Co 52 Iowa Ave Paterson 3 NJ
Carter Motor Co 2711 W George St Chicago 18 Ill
Continental Electric Co Inc 325 Ferry St Newark 5 NJ
Dalmotor Co 1375 Clay St Santa Clara Calif
Dynamatic Div Eaton Mfg Co 3122 14th Ave Kenosha Wis
Elcor Div F L Jacobs Co 4235 W North Ave Chicago 39 Ill
Electric Specialty Co 211 South St Stamford Conn
General Electric Co Apparatus Sales Schnectady 5 NY
Holtzer-Cabot Div National Pneumatic Co Inc 125 Amory St Boston 19 Mass
Howard Industries Inc 1760 State St Racine Wis
IMC Magnetics Corp 570 Main St Westbury NY
Safety Electrical Equipment Corp 1187 Dixwell Ave New Haven Conn
Sangamo Electric Co 11th & Converse Springfield Ill
Small Motors Inc 2076 Elston Ave Chicago 14 Ill
Wagner Electric Corp 6400 Plymouth Ave St Louis 33 Mo
Westinghouse Electric Corp P O Box 2278 Pittsburgh 30 Pa

8H. EXCITERS

For providing and maintaining magnetic field of motors or generators.

Allis (Louis) Co 427 East Stewart St Milwaukee 1 Wis
Allis-Chalmers Mfg Co 930 S 70th St Milwaukee 1 Wis
American Electronics Inc 655 West Washington Blvd Los Angeles 15 Calif
Century Electric Co 1806 Pine St St Louis 3 Mo
Continental Electric Co Inc 325 Ferry St Newark 5 NJ
Eicor Div F L Jacobs Co 4235 W North Ave Chicago 39 Ill
Electric Specialty Co 211 South St Stamford Conn
Elliott Co Jeannette Pa
Fairbanks Morse & Co Electrical Div 303 N Henderson Freeport Ill
General Electric Co Apparatus Sales Schenectady 5 NY
Hertner Electric Co 12690 Elmwood Ave Cleveland 11 Ohio
Ideal Electric and Mfg Co East First St Mansfield Ohio
Kato Engineering Co 1442 First Ave Mankato Minn
Kurz & Root Sales & Engineering Corp 232 East North Island St Appleton Wis
Marathon Electric Mfg Corp Wausau Wisc
Master Electric Div Reliance Electric & Engineering Co 24701 Euclid Ave Cleveland Ohio
Northwestern Electric Co 1750 N Springfield Avenue Chicago 47 Ill
Reliance Electric & Engineering Co 24701 Euclid Ave Cleveland 17 Ohio
Richardson-Allen Corp 116-15 Fifteenth Av College Point LI NY
Safety Electrical Equipment Corp 1187 Dixwell Ave New Haven Conn
Westinghouse Electric Corp P O Box 2278 Pittsburgh 30 Pa

8J. VARIABLE SPEED DRIVES

Allis (Louis) Co 427 East Stewart St Milwaukee 1 Wis
Electric Products Co 1725 Clarkstone Rd Cleveland 12 Ohio
Lewis-Shepard Products Inc 125 Walnut St Watertown Mass
Link-Belt Co 1700 Prudential Plaza Chicago 1 Ill
Morse Chain Co Borg Warner Corp Ithaca NY
Reeves Pulley Div Reliable Electric & Engineering Co 1225 7th St Columbus Ind
Servospeed Div Electro Devices Inc 4 Godwin Ave Paterson NJ
Square D Co Executive Plaza Park Ridge Ill
Sterling Electric Motors Inc 5401 Telegraph Rd Los Angeles 22 Calif
●U S ELECTRICAL MOTORS INC 200 E Slauson Ave Los Angeles 54 Calif—ADV PG 124

TECHNICAL LITERATURE

To obtain the following literature, enter the appropriate Code Numbers* on the Free Information cards elsewhere in this issue.

*Code No.	Description, Pages Catalog No. & Mfr.
8-1	Guide Book Information for Emergency Power; 22p (Caterpillar)
8-2	Generator Sets; 74p (Empire)
8-3	Servo Motors; 19p (IMC Magnetics)
8-4	Electric Power Plants; 22p (Onan)
8-5	Furnace Fan Motors; 24p; Cat. No. B-9001 (Reliance)
8-6	Electric Power & Light Plants; 54p (Universal)

SECTION 9. LIGHTING EQUIPMENT AND LAMPS

See Section 5 for fixture hangers and supports, ballasts, and other lamp accessories; dimmers are listed in 3J.

9A. RESIDENTIAL LIGHTING FIXTURES

1. Ceiling downlights
2. Ceiling suspended units
3. Fluorescent
4. Vaporproof
5. Overall ceilings
6. Wall brackets
7. Bath mirror lights
9. Stair tread lights
10. Portable lamps (floor, table, desk, bed)
11. Entrance, porch, driveway, patio lights
12. Garden lights
13. Illuminated house numbers
14. Night lights
15. Post lights
16. Ultra-violet garden lighting

AOW Corp 450 N Ninth St Elwood Ind (10)
Abrams Lighting 785 Schuykill Ave Philadelphia 46 Pa (3-7)
Ace Lighting Products Co 171 Broad St SW Atlanta 3 Ga (1-2-3-6-7-11)
Acme Lighting & Mfg Co 949 E 31 St Los Angeles 11 Calif (3)
Acme Lite Products Co Inc Congers NY (10)
Active Specialty Corp Elm St Walden NY (1-2-6-7-10-11)
Adjusta Post Mfg Co 908 St Clair St Akron 7 Ohio (15)
Aerolux Lights Corp 653 11th Ave New York 36 NY (10)
Afco Lite Corp 1378 N Wolcott Chicago 22 Ill (11-12)
Alkco Mfg Co 4242 N Lincoln Ave Chicago 18 Ill (1-3)
All-Brite Light Co 400 S 12 St Reading Pa (3)
Amplex Corp 111 Water St Brooklyn 1 NY (1-6-10)
Amplex Corp Glen Cove Rd Carle Place Long Island NY (6-10)
Apollo Lighting Fixture Co Inc 162 W Third St Mt Vernon NY (3)
Appleton Electric Co 1701-59 Wellington Ave Chicago 13 Ill (12)
Arrow Lamps Inc 1270 Broadway New York 1 NY (10)
Art Metal Co 1814 E 40 St Cleveland 3 Ohio (1-6-7-9-11)
Art Metal Lighting Div Wakefield Corp 1814 E 40 St Cleveland 3 Ohio (1-6-7-9-11)
Art Specialty Co 3720 N Milwaukee Ave Chicago 41 Ill (10)
Artcraft Lighting Co Inc 248 McKibben St Brooklyn 6 NY (2-6)
Artistic Lamp Mfg Co Inc 109 Eighth St Passaic NJ (2-10)
Artolier Corp 141 Lanza Ave Garfield NJ (1-2-6-11-12)
Atlas Electric Products Co 319 Ten Eyck St Brooklyn 6 NY (1-9-11)
B M D & R Inc 7020 Walker St St Louis Park Minneapolis 16 Minn (11)
Beckley Electric Co Inc 468-470 Grand Ave Brooklyn 38 NY (12)
Benjamin Div Thomas Industries Inc 207 E Broadway Louisville 2 Ky (11-12)
Black (M) Mfg Co 300-08 N Third St Phila 6 Pa (11-12)
Blackhawk Industries 250 S Main St Dubuque Iowa (11)
Calpa Products Co 5420 Paschall Ave Phila 43 Pa (10)
Calumet Plastics Inc 11201 S Cottage Grove Avenue Chicago 28 Ill (13)
Cannon Electric Co 3208 Humboldt St Los Angeles 31 Calif (12)
Ceiling Materials Co 200 Waring Rd Memphis 17 Tenn (5)
Columbia Electric & Mfg Co North 2310 Fancher Way Spokane Wash (5)
Comet Lamp Co 5 E 35 St New York 16 NY (2)
Compco Corp 1800 N Spaulding Ave Chicago 47 Ill (1-2-3-6-9-11)
Condi-Lite Corp 889 Broadway New York 3 NY (1)

Curtis Development & Mfg Co 3244 N 33 St Milwaukee 16 Wis (13)
Day-Brite Lighting Inc 6260 N Broadway St Louis 15 Mo (1)
Dazor Mfg Corp 4481-99 Duncan Ave St Louis 10 Mo (10)
Duralite Lanterns Inc 163 Long Beach Rd Island Park NY (11-15)
Duray Fluorescent Mfg Co 3318 W Montrose Ave Chicago 18 Ill (3)
E J S Lighting Corp 321 E Pico Blvd Los Angeles 21 Calif (1-2-6-10)
Eagle Electric Mfg Co Inc 23-10 Bridge Plaza South Long Island City 1 NY (6-7-9-10-11)
Eagle Mfg Co 3508 Avalon Blvd Los Angeles 11 Calif (1-6-10)
Edmor Lamp Co Inc 1867 Flatbush Ave Brooklyn 10 NY (6-10)
Electric House Number Co 8670 W Washington Blvd Culver City Calif (13)
Elite Glass Co Inc 111 W 22nd St New York 11 NY (1-2-6)
Emerson-Imperial Lighting Co Loyalhanna Park Latrobe Pa (1-2-6-7-11)
Emerson-Pryne Co Towne Ave at Monterey (P O Box 698) Pomona Calif (1-11)
Esty Mfg Co 112 S Sangamon St Chicago 7 Ill (1-2-3-6-7-11)
Everglow Lighting Fixture Co Inc 332 E Jericho Turnpike Huntington Station NY (3-11)
Federal Lighting Corp 1425 Rockwell Ave Cleveland 14 Ohio (1-2-3-6-11-13)
Flexo International Corp 3720 N Milwaukee Ave Chicago 41 Ill (10)
Fluorescent Equipment & Mfg Co 5105 Cowan Ave Cleveland 27 Ohio (3-7)
Fluorescent Fixtures of California 352 Shaw Rd South San Francisco Calif (3)
Frisbie (H C) Co 1120 E Pico Blvd Los Angeles 21 Calif (1-2-4-5-6-11)
Gem Electric Mfg Co Inc 237 37th Street Brooklyn NY (11-14)
General Lighting Co 248 McKibbin St Brooklyn 6 NY (1-2-3-6-10-11)
Geringer & Sons Mfg Corp Peekskill NY (1-2-3-6)
Gleason Sales Co Inc 5809 W Montrose Ave Chicago 34 Ill (1)
Gill Glass & Fixture Co Philadelphia 34 Pa (1-2-6-7)
Globe Lighting Products Inc 1710 Flushing Ave Brooklyn 37 NY (1-2-3-6-10-11-12)
●GRAYBAR ELECTRIC CO INC 420 Lexington Ave NY 17 NY (2)—ADV PG 2
Great Northern Mfg Corp 1056 N Wood St Chicago 22 Ill (3)
Guth (Edwin F) Co 2615 Washington Blvd St Louis 3 Mo (1-3-5-6-11)
Hadco Aluminum Products Co PO Box 128 Littlestown Pa (11)
Hasco Electric Corp 30 Grove Ave New Rochelle NY (3-12)
Holophane Co Inc 342 Madison Ave New York 17 NY (11)
House-O-Lite Corp 2430 S Ashland Ave Chicago 8 Ill (1-3-6-7-13)
Independent Protection Co Inc 1605-07 S Main St Goshen Ind (11-12)
Industrial Lamp Corp 14th & Blaine Sts Elkhart Ind (10)
International Lighting Mfg Co 1825 N 19 St St Louis 6 Mo (1-2-3-6-7-11-12)
Jackson Electrical Co 900 W Van Buren St Chicago 7 Ill (11)
Jay Lighting Mfg Co Inc 23-29 Quincy St Brooklyn 38 NY (1-2-6-7)
K-B Lighting Mfg Co 2101 Byberry Rd Phila 16 Pa (3)
Kaisan Electric Co Inc 146 Mott St Oceanside LI NY (1-2-6-11)
Kelly Specialty Co 5958-60 Washington Blvd Chicago 44 Ill (13)
Kent Lighting Corp 500 Johnson Ave Brooklyn 37 NY (1-3-6)
Keystone Electric Mfg Co 2228 E Tioga St Phila 34 Pa (3-6)
Kichler (L D) Co 2101 Superior Ave Cleveland 14 Ohio (1-2-6-7)
●KILLARK ELECTRIC MFG CO 3940 Easton Ave St Louis 13 Mo (4-12)—ADV PG 78-79
Kirlin Co 3435 E Jefferson Ave Detroit 7 Mich (1-9-11)
Kliegl Bros Universal Electric Stage Lighting Co Inc 321 W 50 St NY 19 NY (1)
Kliglite Mfg Co 6822 Lynford St Philadelphia Pa (3)
Koch & Lowy Inc 201 E 34 St New York 16 NY (6-10)
LAM Inc 414 Main St Wakefield Mass (3-6-7)
Leader Lamp Mfg Co 476 Broome St NY 13 NY (1-2-6-7-11)
Lightolier Inc 346 Claremont Ave Jersey City 5 NJ (1-2-3-6-7-10-11-12)
Litecraft Mfg Corp 100 Dayton Ave Passaic NJ (1-2-3-5-6-9-11)
Lithonia Lighting Products Co Box 206 Conyers Ga (3)
Luminous Ceilings Inc 3701 N Ravenswood Ave Chicago 13 Ill (5)
Magni Flood Inc 50 Crary Ave Mt Vernon NY (11-12)
Majestic Metal Spinning & Stamping Co Inc 537 Sackett St Brooklyn 17 NY (1-2-6)
Markel Electric Products Inc 145 Seneca St Buffalo 3 NY (1-2-6-11-12)
Marks Mfg Co 700 N Carpenter St Chicago 22 Ill (10)
Markstone Mfg Co 1531 N Kingsbury Chicago 22 Ill (1-2-3-6-7-11)
Marvin Electric Mfg Co 648 Santa Fe Ave Los Angeles 21 Calif (1-3-6-11)
McPhilben Mfg Co Inc 1329 Willoughby Ave Brooklyn 37 NY (4-7-9-11)
Mid-West Chandelier Co 15th & Gentry (P O Box 7365) North Kansas City 16 Mo (3)
Miller Co Illuminating Div 99 Center St Meriden Conn (2)
MiroFlector Co Inc 40 Bayview Ave Inwood LI NY (1-2-6-7-10-11)
Mitchell Lighting Div Compco Corp 1800 N Spaulding Ave Chicago 47 Ill (1-3)
Modern Swimming Pool Co Inc 1 Holland Ave White Plains NY (4)
Moe Light Div Thomas Industries Inc 207 E Broadway Louisville Ky (1-2-3-5-6-7)
N L Corp 2480 E 22 St Cleveland 15 Ohio (1-11-13)
Nemco Electric Co 210 Second Ave Seattle 4 Wash (1-2-4-6-7-11-12)
Neo-Ray Products Inc 315 E 22 St NY 10 NY (3)
Novelty Lighting Corp 2480 E 22 St Cleveland 15 Ohio (1-11-13)
Osoco Mfg Co P O Box 7268 Ft Worth Tex (11)
Pass & Seymour Inc Syracuse 9 NY (1-6-7-11)
Perfect-Line Mfg Corp Old Country Rd & Railroad Ave P O Box 65 Hicksville LI NY (10-11-12)
Pittsburgh Reflector Co Oliver Bldg Mellon Square Pittsburgh 22 Pa (3-5)
Prescolite Mfg Corp 2229 Fourth St Berkeley 10 Calif (1-2-6-7-9-10-11)
Progress Mfg Co Inc Castor Ave & Tulip St Phila 34 Pa (1-2-3-6-7-10-11-12)
Project Fixture Mfg Corp 55 Ongley St Rockville Centre NY (1-2-5-6-7-10-11-12)
Quaker City Electric Mfg Co 2810 E Pacific St Phila 34 Pa (3)
Rab Electric Mfg Co Inc 605 E 132 St New York 54 NY (4-11-12)
Rembrandt Lamp Corp 4500 W Division St Chicago 51 Ill (10)
Revere Electric Mfg Co 7420 N Lehigh Ave Chicago 48 Ill (12)
Rodale Mfg Co Inc 6th & Minor Sts Emmaus Pa (10)
Russell & Stoll Co Inc 125 Barclay St (12)
Segil (L J) Co 2500 W North Ave Chicago 47 Ill (1-2-3-11)
Shalda Mfg Co Inc 156 W Providencia Ave Burbank Calif (12)
Southeast Lighting Inc 521 E 20 St Charlotte 1 NC (3)
Spero Electric Corp 20500 St Clair Ave Cleveland 17 Ohio (4-11-12)
Stabrite Fluorescent Mfg Co 3550 Northwest 49 St Miami Fla (1-3-11)
Steber Div Pyle-National Co 2700 Roosevelt Rd Broadview Ill (11-12)
Sternberg Mfg Co 4510 Addison St Chicago 41 Ill (11)
Stocker & Yale Inc Green St Marblehead Mass (10)
Stonco Electric Products Co 333 Monroe Ave Kenilworth NJ (1-4-6-11-12)
Swivelier Co Inc Nanuet NY (1-2-3-6-7-10-12)
Sylvania Electric Products Inc 730 Third Ave New York 19 NY (1-2)
Tolen (William) & Son Inc 4041 Ridge Ave Philadelphia Pa (10)
Tower Craftsmen Inc 105 Chestnut St Red Bank NJ (10)
Trojan Lighting Co 663 State St San Diego Calif (1)
Ultra-Violet Products Inc 5114 Walnut Grove Ave San Gabriel Calif (16)
Union Insulating Co Inc Box 351 Parkersburg W Va (11-12)
United Lighting & Ceiling Co 2828 Ford St Oakland 1 Calif (5)
Versen (Kurt) Co 4 Slocum Ave Englewood NJ (1-2-6-10)
Virden (John C) Co 5009-6103 Longfellow Ave Cleveland 3 Ohio (1-2-3-6-7-11-12)
Voltarc Tubes Inc 44 Cross St Norwalk Conn (3)
Weiss & Biheiler Merchandise Corp 40 W 20 St New York 11 NY (1-2-6)
Westinghouse Electric Corp P O Box 2278 Pittsburgh 30 Pa (3-14)
White (O C) Sales Co 40 Green St Marblehead Mass (10)
Wilson (J A) Lighting & Display Inc 1502 Industrial Dr Erie Pa (1)

9C. COMMERCIAL, INSTITUTIONAL & INDUSTRIAL LIGHTING EQUIPMENT

1. **Incandescent fixtures**
2. **Fluorescent fixtures**
3. **Mercury & sodium vapor fixtures**
4. **Cold cathode fixtures**
5. **Arc lighting equipment**
6. **Neon lighting**
7. **Explosion-proof fixtures**
8. **Vaporproof fixtures**
9. **Dust-tight fixtures**
10. **Complete luminous ceiling systems**
11. **Warning lights**
12. **Pilot & indicating light assemblies**
13. **Showcase & display lighting**
14. **Emergency lighting unit & systems**
15. **Stage lighting**
16. **Church lighting**
17. **Hospital lighting**
18. **Exit lights**
19. **Public building lighting**
20. **Battery-operated fluorescent fixtures**
21. **Lighted display signs**
22. **High-bay lighting**
23. **Ornamental lighting**
24. **Ultra-violet display lighting**

See also "Outdoor Lighting".

Abolite Lighting Div Jones Metal Products Co West Lafayette Ohio (1)
Abrams Lighting 785 Schuylkill Ave Philadelphia 46 Pa (2-13)
Acme Lighting & Mfg Co 949 E 31 St Los Angeles 11 Calif (2-13)
Adalet Mfg Co 14300 Lorain Ave Cleveland 11 Ohio (8)
Adjustable Fixture Co 104 E Mason St Milwaukee 2 Wis (1-17)
Ainsworth Lighting Inc 38-10 Twenty-Ninth St L I C 1 NY (1-2)
Alkco Mfg Co 4242 N Lincoln Ave Chicago 18 Ill (1-2)
All-Brite Light Co 400 S 12 St Reading Pa (2-13)
Amplex Corp Glen Cove Rd Carle Place Long Island NY (1-13)
Apollo Lighting Fixture Co Inc 162 W Third St Mt Vernon NY (1-2)
Appleton Electric Co 1701-59 Wellington Ave Chicago 13 Ill (1-2-3-7-8-9)
Art Metal Co 1814 E 40 St Cleveland 3 Ohio (1-13)
Art Metal Lighting Div Wakefield Corp 1814 E 40 St Cleveland 3 Ohio (1-13)
Artcraft Lighting Co Inc 248 McKibben St Brooklyn 6 NY (1-2-13)
Atlas Electric Products Co 319 Ten Eyck St Brooklyn 6 NY (1-2-11)
B M D & R Inc 7020 Walker St St Louis Park Minneapolis 16 Minn (1-2-11)
Baker-Barkon Co 1335 S W Morrison St Portland Ore (1)
Benjamin Div Thomas Industries Inc 207 E Broadway Louisville 2 Ky (1-2-3-7-8-9-11-13)
Cable Electric Products Inc 234 Daboll St Providence 7 RI (14)
Canning-Pekara Inc 2144 N Wood St Chicago 14 Ill (2-13-16)
Capitol Hardware Mfg Co Inc 400 N Leavitt St Chicago Ill (13)
Capitol Stage Lighting Co Inc 527 W 45 St New York 36 NY (1-15)
Carpenter Mfg Co 2250 Gilman Square Somerville 45 Mass (11)
Ceiling Materials Co 200 Waring Rd Memphis 17 Tenn (10)
Centralite Co Inc Dayton & Central Aves Cincinnati 14 Ohio (2)
Century Lighting Inc 521 W 43 St New York 36 NY (1-13-15)
Clean Sweep Co 6534½ Whittier Blvd Los Angeles 22 Calif (14)
Cold Cathode Lighting Corp 76 S Bayles Ave Port Washington NY (4-7-8-13)
Cole (C W) & Co Inc P O Box 3382 Los Angeles 54 Calif (1-2-13-15-21)
Colonial Electric Products Div Colonial Neon Co Inc 1-115 Markct St East Paterson NJ (2)
Columbia Electric & Mfg Co North 2310 Fancher Way Spokane Wash (2-9-10-13)
Compco Corp 1800 N Spaulding Ave Chicago 47 Ill (1-2-13)
Condi-Lite Corp 889 Broadway New York 3 NY (1-2)
Control Switch Div Controls Co of America 4218-30 W Lake St Chicago 24 Ill (12)
Controls Co of America Control Switch Div 1420 Delmar Dr Folcroft Pa (12)
Cooper Hewitt Electric Co 720-732 Grand St Hoboken NJ (2-3)
Crouse-Hinds Co Syracuse 1 NY (1-2-3-7-8-9-11-13)
Crownlite Fluorescent Co 7 Roselle St Mineola NY (2-10-13)
Curtis Lighting Div Curtis-All Brite Lighting Inc 6135 W 65 St Chicago 38 Ill (1-2-3)
Cutler-Hammer Inc 228 N 12 Street Milwaukee 1 Wis (12)
Cutler Light Mfg Co 2026 N 22 St Phila 21 Pa (4-13)
Day-Brite Lighting Inc 6260 N Broadway St Louis 15 Mo (1-2)
Dazor Mfg Corp 4481-99 Duncan Ave St Louis 10 Mo (1-2)
Derrick Light & Equipment Co 1201 E Daggett (P O Box 414) Fort Worth Tex (7-8-9)
Dialight Corp 60 Stewart Avenue Brooklyn 37 NY (18)
Dixie Controller Inc Post Office Box 5844 Birmingham 9 Ala (14-15)
Drake Mfg Co 4626 N Olcott Harwood Heights Chicago 31 Ill (12)
Dual-Lite Co Inc Newtown Conn (14-18)
Duray Fluorescent Mfg Co 3318 W Montrose Ave Chicago 18 Ill (2)
Duro-Test Corp 2321 Hudson Blvd North Bergen NJ (1-2-11-13)
E J S Lighting Corp 321 E Pico Blvd Los Angeles 21 Calif (1)
Electric Cord Co 432 Plane St Newark 2 NJ (11-14)
Electric Lighting Sales Inc P O Box 1907 Stockton Calif (2-13)

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New York 36, N.Y.

Electric Re-Light Co Uniman Pl at S Goodman Rochester 20 NY (2)
Electro Lighting Corp 1536 S Paulina St Chicago 8 Ill (1-2-3-10)
Electro Powerpacs Inc 5 Hadley St Cambridge 40 Mass (14)
Emerson-Pryne Co Towne Ave at Monterey (P O Box 698) Pomona Calif (1-13)
Ender-Monarch Corp 141 Lanza Ave Garfield NJ (1-2-4-10)
Everglow Lighting Fixture Co Inc 332 E Jericho Turnpike Huntington Station NY (1-2)
Fannon (John J) Products Co 3000 E Woodbridge Detroit 7 Mich (10)
Federal Lighting Corp 1425 Rockwell Ave Cleveland 14 Ohio (1-2)
●FEDERAL SIGN & SIGNAL CORP 13626 S Western Ave Blue Island Ill (11)—ADV PG 118
Felco Products Inc 8700 Ambassador Row Dallas 19 Tex (2)
Flexo International Corp 3720 N Milwaukee Ave Chicago 41 Ill (1-2)
Fluores-O-Lite Co Evans Terminal North Broad St Hillside 5 NJ (1-2-13)
Fluorescent Equipment & Mfg Co 5105 Cowan Ave Cleveland 27 Ohio (1-2-13)
Fluorescent Fixtures of California 352 Shaw Rd South San Francisco Calif (2)
Frink Corp 211 63rd St Brooklyn 20 NY (1-2-18)
Frisbie (H C) Co 1120 E Pico Blvd Los Angeles 21 Calif (1)
Fullerton Mfg Co Willard Rd Norwalk Conn (1-2-10)
Garcy Lighting Div Garden City Plating & Mfg Co 2475 Elston Ave Chicago 47 Ill (1-2-13)
Gedney Electric Co Americas Bldg Radio City NY 20 NY (8)
●GENERAL ELECTRIC SUPPLY CO 1260 Boston Ave Bridgeport Conn (1-2-3-7-8-9-11-14-18-19-20) ADV PG 84-85
General Lighting Co 248 McKibbin St Brooklyn 6 NY (1-2-13)
Gibson Mfg Co 1919 Piedmont Circle NE Atlanta Ga (2)
Gleason Sales Co Inc 5809 W Montrose Ave Chicago 34 Ill (1)
Globe Lighting Products Inc 1710 Flushing Ave Brooklyn 37 NY (1-2-13)
●GOOD MFG CO 1015 N Halsted St Chicago 22 Ill (2)—ADV PG 120
●GRAYBAR ELECTRIC CO INC 420 Lexington Ave NY 17 NY (1-2)—ADV PG 2
Great Northern Mfg Corp 1056 N Wood St Chicago 22 Ill (2-13)
Gruber Bros Inc 125 South First St Brooklyn 11 NY (1-2-9-13)
Guth (Edwin F) Co 2615 Washington Blvd St Louis 3 Mo (1-2-3-9-13-15)
Hasco Electric Corp 30 Grove Ave New Rochelle NY (1-2-13)
Holophane Co Inc 342 Madison Ave New York 17 NY (1-2-3-8-9-10)
House-O-Lite Corp 2430 S Ashland Ave Chicago 8 Ill (2-13-14)
Hub Electric Co 2255 W Grand Ave Chicago 12 Ill (1-2-11-15)
Illuminating Engineering Co 2347 East Nine Mile Rd Hazel Park Mich (4)
Industrial Devices Inc Edgewater 19 NJ (12)
Integrated Ceilings & Grilleworks Inc 11766 W Pico Blvd Los Angeles 64 Calif (10)
International Lighting Mfg Co 1825 N 19 St Louis 6 Mo (1-2)
Jackson Electrical Co 900 W Van Buren St Chicago 7 Ill (1-8-9)
Jay Lighting Mfg Co Inc 23-29 Quincy St Brooklyn 38 New York (1)
Joleco Corp 2513 Baldwin St St Louis 6 Mo (1-2-21)
Joy Mfg Co Electrical Products Div 1201 Macklind Ave St Louis 10 Mo (9)
K-B Lighting Mfg Co 2101 Byberry Rd Phila 16 Pa (2)
Kalsan Electric Co Inc 146 Mott St Oceanside LI NY (1-2-11-13)
Kayline Co 1241 E 45 St Cleveland 14 Ohio (1-2)
Kelly Specialty Co 5958-60 Washington Blvd Chicago 44 Ill (11)
Kembert-Arpag Co 220 Coster St Bronx 59 NY (2)
Kent Lighting Corp 500 Johnson Ave Brooklyn 37 NY (1-2-10-13)
Keystone Electric Mfg Co 2228 E Tioga St Phila 34 Pa (2-13)
●KILLARK ELECTRIC MFG CO 3940 Easton Ave St Louis 13 Mo (1-3-7-8-9-12-13)—ADV PG 78-79
Kirkland (H R) Co 8 King St Morristown NJ (11-12)
Kirlin Co 3435 E Jefferson Ave Detroit 7 Mich (1-2-13-18)
Kliegl Bros Universal Electric Stage Lighting Co Inc 321 W 50 St NY 19 NY (1-2-14-15)
Kliglite Mfg Co 6822 Lynford St Philadelphia Pa (2-13)
Koch & Lowry Inc 201 E 34 St New York 16 NY (1)
Kord (Leonard E) Co 2751 N Emerson Ave Indianapolis 18 Ind (1-2-16)
Kurtzon (Moris) Inc 1420 S Talman Ave Chicago 8 Ill (1-2-11-13)
LAM Inc 414 Main St Wakefield Mass (1-2-16-17-19)
L & P Lighting Box 157 Olive Branch Miss (2-10-13-16)
Larco Inc Route 20 East Painesville Ohio (9-11)
Leecraft Mfg Co Inc 58 Greene St New York 12 NY (12)
Lightalarms Inc 95 Atlantic Ave Brooklyn 1 NY (14)
Lighting Dynamics Inc 300 N Baldwin Park Blvd City of Industry Calif (1-2-13)
Lighting Products Inc 1549 Park Ave West Highland Park Ill (2)
Lightmore Appliance Corp 651-5 Driggs Ave Brooklyn 11 NY (21)
Lightolier Inc 346 Claremont Ave Jersey City 5 NJ (1-2)
Line Material Industries McGraw-Edison Co 700 W Michigan St Milwaukee Wis (1-2)
Litecontrol Corp 36 Pleasant St Watertown 72 Mass (1-2-13)
Litecraft Mfg Corp 100 Dayton Ave Passaic NJ (1-2-8-9-10-13)
Lithonia Lighting Products Co Box 206 Conyers Ga (2-13)
Lumi Dyne Corp 627-39 Banning St Los Angeles 12 Calif (10)
Luminous Ceilings Inc 3701 N Ravenswood Ave Chicago 13 Ill (2-10-13)
Luxor Lighting Products Inc 350 5th Ave New York 1 NY (1-2)
Magni Flood Inc 50 Crary Ave Mt Vernon NY (13)
Major Equipment Co Inc 4603 W Fullerton Ave Chicago 39 Ill (15)
Manning (RA) Co Inc 1810 North Ave Sheboygan Wis (16-19)
Marco Industries 207 S Helena St Anaheim Calif (11-12)
Markstone Mfg Co 1531 N Kingsbury Chicago 22 Ill (1-2)
Marlou Lights Inc Fanwood NJ (2)
Marvel Lamp Co 307 Newark St Hoboken NJ (13)
Masterlite Mfg Co 2758 Kensington Ave Phila Pa (2)
McPhilben Mfg Co Inc 1329 Willoughby Ave Brooklyn 37 NY (1-2-3-8-9)
Meierjohan-Wengler 1102 W 9th St Cincinnati 3 Ohio (16-19)
Metalcraft Products Co Inc 6225 State Rd Philadelphia 35 Pa (2)
Mid-West Chandelier Co 15th & Gentry (P O Box 7365) North Kansas City 16 Mo (2-13)
Midwest Lighting Products Co P O Box 536 Edgewater Branch Cleveland 7 Ohio (1)
Miller Co Illuminating Div 99 Center St Meriden Conn (1-2-3-8-9)
MiroFlector Co Inc 40 Bayview Ave Inwood LI NY (1-13-15)
Mitchell Lighting Div Compco Corp 1800 N Spaulding Ave Chicago 47 Ill (1-2-13)
Modern Light Co Inc 7809 Maplewood Industrial Court St Louis 17 Mo (2)
Moe Light Div Thomas Industries Inc 207 E Broadway Louisville Ky (1-2)
Moldcast Mfg Co 236 South St Newark 5 NJ (1-3)
Mole-Richardson Co 937 N Sycamore Ave Hollywood 38 Calif (5)
Multi Electric Mfg Inc 4223 W Lake St Chicago 24 Ill (1-2-3-8-9)
N L Corp 2480 E 22 St Cleveland 15 Ohio (1)
Natale Machine & Tool Co 339 Highway #17 Carlstadt NJ (1)
National Cathode Corp 317 E 34 St New York 16 NY (4-10)
Nemco Electric Co 210 Second Ave Seattle 4 Wash (1-2-11-13)
Neo-Ray Products Inc 315 E 22 St NY 10 NY (1-2-10-13-15)
Nepco Mfg Co 4230 N Sayre Chicago 34 Ill (13)
Nicad Div Gould-National Batteries Inc Easthampton Mass (14)
Noel Mfg Co 3 W 18 St New York 11 NY (1)
Northern Incandescent Lamp Co 1 Newark St Hoboken NJ (1)
Northern Light Co 1661 N Water St Milwaukee 2 Wis (2-10-13)
Overbagh & Ayres Mfg Co 411 S Clinton St Chicago 7 Ill (1-8)
Palco Mfg Co 1260 Pennsylvania Ave San Francisco 7 Calif (17)
Paramount Industries Inc G-1080 Ballanger Rd Flint 4 Mich (2)
Penetray Corp 615 Front St Toledo 5 Ohio (1-13-15)
Penn (W M) Fluorescent Light Mfg Co 426 E Allegheny Ave Philadelphia 34 Pa (2-13)
Perfeclite Co 1457 E 40 St Cleveland 3 Ohio (1-8-18)
Perfect-Line Mfg Corp Old Country Rd & Railroad Ave P O Box 65 Hicksville LI NY (8-9-13)
Perkins Battery Co 214 Golden Lane New Oxford Pa (14)
Phillips (Oscar) Co 9701 Reading Rd (Box 21) Cincinnati 15 Ohio (2)
Pittsburgh Reflector Co Oliver Bldg Mellon Square Pittsburgh 22 Pa (1-2-10-13)
Portable Light Co Inc 65 Passaic Ave Kearny NJ (11-14)
Prescolite Mfg Corp 2229 Fourth St Berkeley 10 Calif (1-2-13-18)
Price Bros Inc 4301 W Madison St Chicago 24 Ill (11)
Project Fixture Mfg Corp 55 Ongley St Rockville Centre NY (1-11)
Pyle-National Co 1344 N Kostner Ave Chicago 51 Ill (7-8-9-11-12)
●QUADRANGLE MFG CO 32 S Peoria St Chicago 7 Ill (1-3-8-9-11-13)—ADV PG 123
Quaker City Electric Mfg Co 2810 E Pacific St Phila 34 Pa (2-13)
Rab Electric Mfg Co Inc 605 E 132 St New York 54 NY (7-8)
Rambusch Decorating Co 40 W 13 St New York 11 NY (1-16-23)
Revere Electric Mfg Co 7420 N Lehigh Ave Chicago 48 Ill (1-2)
Ruby-Philite Corp 32-02 Queens Blvd L I C 1 NY (1-2)
Russell & Stoll Co Inc 125 Barclay St NY 7 NY (7-8-9)
Scranton Storage Battery Corp Archbald Pa (14)
Segil (L J) Co 2500 W North Ave Chicago 47 Ill (2-13)
Sentry-Lite & Battery Div Hobby & Brown Electronic Corp 237 Sunrise Highway Rockville Centre NY (14)
Shalda Mfg Co Inc 156 W Providencia Ave Burbank Calif (1-3-8-9-11-13-14)
Silvray Lighting Inc 100 W Main St Bound Brook NJ (1-2-13)
Simes Co Inc 114 15th Ave College Point LI NY (1-2-3-8-9-11-17)
Sireno Signal Mfg Co 65 Passaic Ave Kearny NJ (11)
Smithcraft Corp 217 Everett Ave Chelsea 50 Mass (2-10)
Smoot-Holman Co 321 N Eucalyptus Ave (P O Box 4097) Inglewood Calif (1-2-3-8-9)
Solar Light Mfg Co 400 N Ashland Chicago 22 Ill (1-2-13)
Solux Corp 58-17 28th Ave Woodside 77 LI NY (1-2-8-11-13)
Southeast Lighting Inc 521 E 20 St Charlotte 1 NC (2)
Stabrite Fluorescent Mfg Co 3550 Northwest 49 St Miami Fla (1-2-13)
Stamford Metal Specialty Co Inc 429 W Broadway New York 12 NY (1-2)
Standard Electric Time Co 89 Logan St Springfield 2 Mass (14)
Standard Portable Cord Co Inc Mayville NY (14)
Steber Div Pyle-National Co 2700 Roosevelt Rd Broadview Ill (1-8-13-22)
Sternberg Mfg Co 4510 Addison St Chicago 41 Ill (1-16)
Stocker & Yale Inc Green St Marblehead Mass (2-9-13)
Stonco Electric Products Co 333 Monroe Ave Kenilworth NJ (1-3-8-9-11-13-14-15-18-19)
Sun-Lite Mfg Co 2555 Bellevue Ave Detroit 7 Mich (1-2-13)
Sunbeam Lighting Co 777 E 14 Pl Los Angeles 21 Calif (1-2-13-17)
Superior Electric Co 83 Laurel St Bristol Conn (15)
Supreme Lighting Co 600 E Turner St Los Angeles Calif (1-2)
Surrette Storage Battery Co Inc Jefferson Ave Salem Mass (14)
Suttle Equipment Corp 135 S LaSalle St Chicago 3 Ill (12)
Swedish Iron & Steel Corp 910 Westfield Ave Elizabeth NJ (2)
Swivelier Co Inc Nanuet NY (1-2-13)
Sylvania Electric Products Inc 730 Third Ave New York 19 NY (1-2-12)
Tedcar Products Co Box 1209 Union NJ (11)
Tod Lite Inc 3401 NW 10th St Oklahoma City Okla (14)
Transolite Corp 515 Madison Ave New York 36 NY (2)
Tri-Part Mfg Co 359 S Jessie St (P O Box 178) Pontiac Mich (2-8-13)
Trippe Mfg Co 133 N Jefferson St Chicago 6 Ill (11)
Trojan Lighting Co 663 State St San Diego Calif (1)
U-C-Lite Mfg Co 1050 W Hubbard St Chicago 22 Ill (11)
Ultra-Violet Products Inc 5114 Walnut Grove Ave San Gabriel Calif (24)
Union Insulating Co Inc Box 351 Parkersburg W Va (8-9)
United Lighting & Ceiling Co 2828 Ford St Oakland 1 Calif (10-19)
United States Radium Corp Hanover Ave Morristown NJ (11-12-14)
V V Fitting Co P O Box 1253 Merchantville NJ (8-9)
Versen (Kurt) Co 4 Slocum Ave Englewood NJ (1-13-17)
Virden (John C) Co 5009-6103 Longfellow Ave Cleveland 3 Ohio (2)
Voigt Co 1636 N Carlisle St Phila 21 Pa (16-18)
Wakefield Lighting Div Wakefield Corp 731 S Water St Vermillion Ohio (1-2-10)
Webb Electric Mfg Co 1701 SW Jefferson St Portland 1 Ore (1)
Weiss & Biheller Merchandise Corp 40 W 20 St New York 11 NY (1)
Wellmade Metal Products Co 860 81st Ave Oakland 21 Calif (2-10)
Westinghouse Electric Corp P O Box 2278 Pittsburgh 30 Pa (7-12-15-16-17-19)
Westinghouse Electric Corp Lighting Div 1216 W 58th St (P O Drawer 5817) Cleveland 1 Ohio (1-2-3-9)
●WESTINGHOUSE ELECTRIC SUPPLY CO 3 Gateway Center (Box 448) Pittsburgh 30 Pa (1-2-3-8-9)—ADV PG 2nd Cover
Wheeler Reflector Co 275 Congress St Boston 10 Mass (1-2-3-8-9-13)
White (O C) Sales Co 40 Green St Marblehead Mass (1-2)
Wide-Lite Corp P O Box 191 Houston 1 Tex (3-8)
Wiley (R & W) Inc Dearborn & Bridge St Buffalo 7 NY (2)
Williams (H E) Products Co 106 S Main St Carthage Mo (2-13)

Wilmot Castle Co Box 629 Rochester 2 NY (7-17)
Wilson (J A) Lighting & Display Inc 1502 Industrial Dr Erie Pa (1-10)
●WIREMOLD CO Hartford 10 Conn (13)—ADV PG 4
Woodhead (Daniel) Co 15 N Jefferson St Chicago 6 Ill (8)
Woodward Machine Co Lighting Div 4833 Elmhurst Detroit 4 Mich (8-9)
Work-O-Lite Co 522 Cortlandt St Belleville 9 NJ (2-13)

9D. OUTDOOR LIGHTING EQUIPMENT

1. **Airport lighting**
2. **Floodlights**
3. **Beacons & searchlights**
4. **Spotlights**
5. **Street & highway lighting**
6. **Lighting towers, poles & standards**
7. **Sign lighting**
8. **Obstruction lighting**
9. **Traffic signals & controls**
10. **Service station lighting**
11. **Marine lighting**
12. **Underwater lighting**
13. **Parking and area lighting**
14. **Bridge lighting**
15. **Underwater lighting, low-voltage**

Equipment manufactured for specialized commercial and residential applications. Residential outdoor lighting is included in Residential Lighting, Sec. 9A.

Abolite Lighting Div Jones Metal Products Co West Lafayette Ohio (2)
Abrams Lighting 785 Schuylkill Ave Philadelphia 46 Pa (4)
Afco Lite Corp 1378 N Wolcott Chicago 22 Ill (2)
Alexander-Tagg Industries Inc Jacksonville Road at Summit Ave Hatboro Pa (4)
American Concrete Corp 5092 N Kimberly Ave Chicago 30 Ill (6)
Appleton Electric Co 1701-59 Wellington Ave Chicago 13 Ill (2)
Art Metal Lighting Div Wakefield Corp 1814 E 40 St Cleveland 3 Ohio (2-4)
Beckley Electric Co Inc 468-470 Grand Ave Brooklyn 38 NY (2-4)
Benjamin Div Thomas Industries Inc 207 E Broadway Louisville 2 Ky (2)
Canning-Pekara Inc 2144 N Wood St Chicago 14 Ill (2)
Carpenter Mfg Co 2250 Gilman Square Somerville 45 Mass (8)
Cold Cathode Lighting Corp 76 S Bayles Ave Port Washington NY (5)
Cole (C W) & Co Inc P O Box 3382 Los Angeles 54 Calif (4)
Colonial Electric Products Div Colonial Neon Co Inc 1-115 Market St East Paterson NJ (5-6-10-13)
Columbia Electric & Mfg Co North 2310 Fancher Way Spokane Wash (2-7-10)
Compco Corp 1800 N Spaulding Ave Chicago 47 Ill (2-5-10-13)
Cope (T J) Div Rome Cable Corp Third & Walnut Sts Collegeville 5 Pa (5)
Crouse-Hinds Co Syracuse 1 NY (1 thru 5)
Cutler Electrical Products Inc 5524 Haverford Ave Philadelphia Pa (7)
Derrick Light & Equipment Co 1201 E Daggett (P O Box 414) Fort Worth Tex (2)
Dryomatic Corp 715 N Fayette St (P O Box 591) Alexandria Va (9)
Duro-Test Corp 2321 Hudson Blvd North Bergen NJ (2)
Electric Lighting Sales Inc P O Box 1907 Stockton Calif (5-10)
Electro Lighting Corp 1536 S Paulina St Chicago 8 Ill (2-4)
Elreco Corp 2000 Central Ave Cincinnati 14 Ohio (6)
Emarco Corp 1950 Neva Drive Dayton 14 Ohio (8)
General Electric Co Apparatus Sales Schenectady 5 NY (2-3-5)
●GENERAL ELECTRIC SUPPLY CO 1260 Boston Ave Bridgeport Conn (1-2-4 thru 8-10-13)—ADV PG 84-85
Globe Lighting Products Inc 1710 Flushing Ave Brooklyn 37 NY (4)
●GRAYBAR ELECTRIC CO INC 420 Lexington Ave NY 17 NY (1-3-5)—ADV PG 2
Great Northern Mfg Corp 1065 N Wood St Chicago 22 Ill (2-5)
Guardian Light Co 500 N Blvd Oak Park Ill (5-6)
Guth (Edwin F) Co 2615 Washington Blvd St Louis 3 Mo (2)
Holophane Co Inc 342 Madison Ave New York 17 NY (2-5)
House-O-Lite Corp 2430 S Ashland Ave Chicago 8 Ill (2-4)
Hub Electric Co 2255 W Grand Ave Chicago 12 Ill (4)
Hubbard & Co 6301 Butler St Pittsburgh 1 Pa (1-2-5)
Hughey & Phillips Inc 3200 North San Fernando Blvd Burbank Calif (8)
Jackson Electrical Co 900 W Van Buren St Chicago 7 Ill (2-4-13)
Joslyn Mfg & Supply Co 3700 S Morgan St Chicago 9 Ill (5)
Joy Mfg Co Electrical Products Div 1201 Macklind Ave St Louis 10 Mo (2-4)
Joy Mfg Co H W Oliver Bldg Pittsburgh 22 Pa (2)
K-B Lighting Mfg Co 2101 Byberry Rd Phila 16 Pa (2)
Kalsan Electric Co Inc 146 Mott St Oceanside LI NY (4)
Kayline Co 1241 E 45 St Cleveland 14 Ohio (4)
Kenworth Co Winsted 1 Minn (2)
Kerrigan Iron Works Co 1033 Herman St Nashville 2 Tenn (5-6)
●KILLARK ELECTRIC MFG CO 3940 Easton Ave St Louis 13 Mo (2-4-5)—ADV PG 78-79
Kliegl Bros Universal Electric Stage Lighting Co Inc 321 W 50 St NY 19 NY (2-4)
Kord (Leonard E) Co 2751 N Emerson Ave Indianapolis 18 Ind (6-13)
Line Material Industries McGraw-Edison Co 700 W Michigan St Milwaukee Wis (1-2-3-5)
Magni Flood Inc 50 Crary Ave Mt Vernon NY (2)
Manning (RA) Co Inc 1810 North Ave Sheboygan Wis (2)
Marbelite Co Inc 179 N 10 St Brooklyn 11 NY (9)
Marine Electric Co 195 Fremont San Francisco Calif (11)
McPhilben Mfg Co Inc 1329 Willoughby Ave Brooklyn 37 NY (5)
Metalcraft Products Co Inc 6225 State Rd Philadelphia 35 Pa (13)
Meyer Machine Inc Red Wing Minn (6)
Midwest Lighting Products Co P O Box 536 Edgewater Branch Cleveland 7 Ohio (2)
Millerbernd Mfg Co Winsted Minn (5-6)
MiroFlector Co Inc 40 Bayview Ave Inwood LI NY (2-4)
Mitchell Lighting Div Compco Corp 1800 N Spaulding Ave Chicago 47 Ill (1-2-13)
Modern Swimming Pool Co Inc 1 Holland Ave White Plains NY (12)
Moldcast Mfg Co 236 South St Newark 5 NJ (2-13)
Multi Electric Mfg Inc 4223 W Lake St Chicago 24 Ill (1-2-4)
Natale Machine & Tool Co 339 Highway #17 Carlstadt NJ (2-4)
Nepo Mfg Co 4230 N Sayre Chicago 34 Ill (2-5)
Overbagh & Ayres Mfg Co 411 S Clinton St Chicago 7 Ill (2)
Penetray Corp 615 Front St Toledo 5 Ohio (2)
Perfect-Line Mfg Corp Old Country Rd & Railroad Ave P O Box 65 Hicksville LI NY (2-4)
●PFAFF & KENDALL 84 Foundry St Newark 5 NJ (5-13)—ADV PG 106
Philadelphia Electrical & Mfg Co 1200-36 N 31 St Phila 21 Pa (2-5-10-13)
Phillips (Oscar) Co 9701 Reading Rd (Box 21) Cincinnati 15 Ohio (2-10)
Pittsburgh Reflector Co Oliver Bldg Mellon Square Pittsburgh 12 Pa (2-4)
Project Fixture Mfg Corp 55 Ongley St Rockville Centre NY (4)
Pyle-National Co 1344 N Kostner Ave Chicago 51 Ill (2)
●QUADRANGLE MFG CO 32 S Peoria St Chicago 7 Ill (2-7-13)—ADV PG 123
Rab Electric Mfg Co Inc 605 E 132 St New York 54 NY (2-4)
Ray-O-Vac Co 212 E Washington Ave Madison 10 Wis (9-11-12)
Revere Electric Mfg Co 7420 N Lehigh Ave Chicago 48 Ill (1-2-4-5-6)
Rodale Mfg Co Inc 6th & Minor Sts Emmaus Pa (2-4)
Rostan Corp 5660 59th St Maspeth 78 LI NY (6)
Rusgreen Mfg Co 14262 Birwood Ave Detroit 38 Mich (5)
Ryther Purdy Lumber Co Inc 501 Tiffany St New York 59 NY (6)
Shalda Mfg Co Inc 156 W Providencia Ave Burbank Calif (2-4)
Simes Co Inc 114 15th Ave College Point LI NY (5-6-9-11)
Sireno Signal Mfg Co 65 Passaic Ave Kearny NJ (3-4)
Smoot-Holman Co 321 N Eucalyptus Ave (P O Box 4097) Inglewood Calif (2)
Solar Light Mfg Co 400 North Ashland Chicago 22 Ill (2)
Spero Electric Corp 20500 St Clair Ave Cleveland 17 Ohio (2-4)
Stabrite Fluorescent Mfg Co 3550 Northwest 49 St Miami Fla (2)
Steber Div Pyle-National Co 2700 Roosevelt Rd Broadview Ill (2-4)
Sterner Industries Winsted 1 Minn (2)
Stonco Electric Products Co 333 Monroe Ave Kenilworth NJ (1-2-4-7-8-10-11-12-13-14)
Sunbeam Lighting Co 777 E 14th Pl Los Angeles 21 Calif (5)
Swivelier Co Inc Nanuet NY (2-4)
Thompson Electric Co P O Box 873 Cleveland 22 Ohio (5)
Tod-Lite Inc 3401 N W 10 St Oklahoma City Okla (4)
●UNION METAL MFG CO 1432 Maple Ave N E Canton 5 Ohio (6)—ADV PG 119
Utilities Service Co 1 Pine St Allentown Pa (5)
Wallace & Tiernan Inc 25 Main St Belleville NJ (1-11-14)
Westinghouse Electric Corp P O Box 2278 Pittsburgh 30 Pa (4-6-10-11-12-13)
Westinghouse Electric Corp Lighting Div 1216 W 58th (P O Drawer 5817) Cleveland 1 Ohio (1-2-5)
●WESTINGHOUSE ELECTRIC SUPPLY CO 3 Gateway Center (Box 448) Pittsburgh 30 Pa (1 thru 5)—ADV PG 2nd Cover
Wheeler Reflector Co 275 Congress St Boston 10 Mass (2-5)
Wide-Lite Corp P O Box 191 Houston 1 Tex (2-13)
Wiley (R&W) Inc Dearborn & Bridge St Buffalo 7 NY (4)
Woodward Machine Co Lighting Div 4833 Elmhurst Detroit 4 Mich (2)
Work-O-Lite 522 Cortlandt St Belleville 9 NJ (2)

9E. PORTABLE LIGHTING EQUIPMENT

1. **Machine & bench lights**
2. **Extension cord & lamp**
3. **Extension cord & lamp with transformer**
4. **Reel-type extension lamp**
5. **Emergency lights**
6. **Inspection lights**
7. **Trouble light handles & guards**
8. **Explosion-proof hand lamps**
9. **Vaporproof hand lamps**
10. **Rechargeable hand lamps**
11. **Mobile working lights**

For portable lamps for residential use see "Residential Lighting."

●ADJUSTABLE FIXTURE CO 104 E Mason St Milwaukee 2 Wis (1)—ADV PG 110
Aero-Motive Mfg Co 1803 Alcott St Kalamazoo 24 Mich (4-6)
Arco Mfg Co 1701 13th Ave North (Box 817) Grand Forks ND (1)
Benjamin Div Thomas Industries Inc 207 E Broadway Louisville 2 Ky (1)
Benjamin Electric Mfg Co Northwest Highway & Seegers Rd Des Plaines Ill (1-2)
Benjamin Reel Products Inc 10700 Broadway Cleveland 25 Ohio (7)
Burton Mfg Co 2520 Colorado Ave Santa Monica Calif (1)
Carpenter Mfg Co 2250 Gilman Square Somerville 45 Mass (5)
Columbia Wire & Supply Co 2850 Irving Park Rd Chicago 18 Ill (2-3-4)
Commercial Reflector & Mfg Co 3109 Maple Ave Los Angeles 11 Calif (6)
Compco Corp 1800 N Spaulding Ave Chicago 47 Ill (2)
Cordomatic Div Vacuum Cleaner Corp of America 1724 W Indiana Ave Phila 32 Pa (4)
Crouse-Hinds Co Syracuse 1 NY (1-2)
Day-Ray Products Inc 1133 Mission St South Pasadena Calif (2-3)
Dazor Mfg Corp 4481-99 Duncan Ave St Louis 10 Mo (1-6)
Electra Mfg Co 4051 Broadway Kansas City Mo (5)
Ericson Mfg Co 1660 Hayden Ave Cleveland 12 Ohio (2-3-4-6-8-9)
Flexo International Corp 3720 N Milwaukee Ave Chicago 41 Ill (1)
Fostoria Corp N Main St Fostoria Ohio (1)
Gardner Products Co Div Detroit Industrial Products Co 15244 Aubrey Detroit 39 Mich (1)
Industrial Electrical Works Inc 1509 Chicago St Omaha 2 Neb (4)
Joy Mfg Co Electrical Products Div 1201 Macklind Ave St Louis 10 Mo (2-3)
Joy Mfg Co H W Oliver Bldg Pittsburgh 22 Pa (2-3)
Koch & Lowy Inc 201 E 34 St New York 16 NY (4)
Koehler Mfg Co 395 Lincoln St Marlboro Mass (5)
McGill Mfg Co Inc Valparaiso Ind (2)
Michigan Fluorescent Light Div 393 Orchard Lake Ave Pontiac Mich (1)
Murray (D A) Co Inc 632 N Mill St Tipton Ind (2)
Natale Machine & Tool Co 339 Highway #17 Carlstadt NJ (2)
Project Fixture Mfg Corp 55 Ongley St Rockville Centre NY (2)
Pyle-National Co 1344 N Kostner Ave Chicago 51 Ill (2)
Royal Electric Corp 95 Grand Ave Pawtucket RI (2)
Sireno Signal Mfg Co 65 Passaic Ave Kearny NJ (5)
Standard Portable Cord Co Inc Mayville NY (1-2)
Stocker & Yale Inc Green St Marblehead Mass (1-2-3-6)
Stonco Electric Products Co 333 Monroe Ave Kenilworth NJ (2)
Sun-Lite Mfg Co 2555 Bellevue Ave Detroit 7 Mich (1)
Surrette Storage Battery Co Inc Jefferson Ave Salem Mass (5)
Swivelier Co Inc Nanuet NY (1-2)

U-C-Lite Mfg Co 1050 W Hubbard St Chicago 22 Ill (5-8)
Ultra-Violet Products Inc 5114 Walnut Grove Ave San Gabriel Calif (6)
Vimco Mfg Co Inc Main St Holland NY (1)
Westinghouse Electric Corp P O Box 2278 Pittsburgh 30 Pa (1)
●WESTINGHOUSE ELECTRIC SUPPLY CO 3 Gateway Center (Box 448) Pittsburgh 30 Pa (1 thru 5)—ADV PG 2nd Cover
White (O C) Sales Co 40 Green St Marblehead Mass (1)
Wide-Lite Corp P O Box 191 Houston 1 Tex (11)
Woodhead (Daniel) Co 15 N Jefferson St Chicago 6 Ill (2-3-4-6)
Woodward Machine Co Lighting Div 4833 Elmhurst Detroit 4 Mich (1)

9F. GASEOUS DISCHARGE LAMPS

1. Arc
2. Cold cathode
3. Fluorescent
4. Mercury vapor
5. Sodium vapor

Light sources only; fixtures are listed under "Portable Lamps" and "Residential Lighting."

Amplex Corp Glen Cove Rd Carle Place Long Island NY (3-4)
Champion Lamp Works 330 Lynnway Lynn Mass (3-4)
Cold Cathode Lighting Corp 76 S Bayles Ave Port Washington NY (2)
Cooper Hewitt Electric Co 720-732 Grand St Hoboken NJ (3-4)
Duro-Test Corp 2321 Hudson Blvd North Bergen NJ (2-3-4)
General Electric Co Lamp Div Large Lamp Dept Nela Park Cleveland Ohio (3-4)
●GRAYBAR ELECTRIC CO INC 420 Lexington Ave NY 17 NY (3)—ADV PG 2
Illuminating Engineering Co 2347 East Nine Mile Rd Hazel Park Mich (2)
Interlectric Div El-Tronics Inc 1401 Lexington Ave Warren Pa (3)
Luxor Lighting Products Inc 350 5th Ave New York 1 NY (2-3-4)
Marvel Lamp Co 307 Newark St Hoboken NJ (3)
National Cathode Corp 317 E 34 St New York 16 NY (2)
Penetray Corp 615 Front St Toledo 5 Ohio (3-4)
Pollak Luminescent Corp 1105 W Lawrence Ave Chicago 40 Ill (2)
Radiant Lamp Corp 300 Jelliff Ave Newark 8 NJ (4)
Solar Electric Corp 121 Central Ave Warren Pa (3)
Suclar Laboratories Inc 1197 McCarter Highway Newark NJ (3)
Supro Lux Mfg Co Inc 406-416 E 161 St New York 51 NY (2-3)
Swedish Iron & Steel Corp 910 Westfield Ave Elizabeth NJ (2)
Sylvania Electric Products Inc 730 Third Ave New York 19 NY (1-2-3)
Voltarc Tubes Inc 44 Cross St Norwalk Conn (2-3)
Westron Corp 652 Hudson St NY 14 NY (2-3-4)

9G. FILAMENT LAMPS

1. Clear or frosted
2. Colored
3. Glow (neon & argon)
4. Infrared
5. Ultra-violet
6. Insect repellent
7. Miniature
8. Reflector flood & PAR
9. Sealed beam
10. Decorative
11. Quartz
12. Traffic signal
13. Shock-resistant
14. Series street lighting

Light sources only; fixtures are listed under "Portable Lamps" and "Residential Lighting."

Aerolux Lights Corp 653 11th Ave New York 36 NY (2-3-5-10)
Amplex Corp Glen Cove Rd Carle Place Long Island NY (1-2-4-6-8-9)
Champion Lamp Works 330 Lynnway Lynn Mass (1-2-4-6-8-10)
Chicago Miniature Lamp Works 1500 N Ogden Ave Chicago 10 Ill (1-2-3-7-9)
Cold Cathode Lighting Corp 76 S Bayles Ave Port Washington NY (5)
Comet Lamp Co 5 E 35 St New York 16 NY (10)
Dialight Corp 60 Stewart Ave Brooklyn 37 NY (3-7)
Drake Mfg Co 4626 N Olcott Harwood Heights Chicago 31 Ill (3-7)
Duro-Test Corp 2321 Hudson Blvd North Bergen NJ (1-2-4-6-8)
Elite Glass Co Inc 111 W 22nd St New York 11 NY (1)
General Electric Co Lamp Div Large Lamp Dept Nela Park Cleveland Ohio (1 thru 10)
General Electric Co Lamp Div Miniature Lamp Dept Nela Park Cleveland Ohio (1 thru 10)
●GENERAL ELECTRIC SUPPLY CO 1260 Boston Ave Bridgeport Conn (1 thru 11)—ADV PG 84-85
●GRAYBAR ELECTRIC CO INC 420 Lexington Ave NY 17 NY (1-2)—ADV PG 2
Hudson Lamp Co 528 Elm St Kearny NJ (3-7)
Interlectric Div El-Tronics Inc 1401 Lexington Ave Warren Pa (1-6-8)
Luxor Lighting Products Inc 350 5th Ave New York 1 NY (1-2-4-6-8-9-12-13-14)
Marco Industries 207 S. Helena St Anaheim Calif (3-7)
Marvel Lamp Co 307 Newark St Hoboken NJ (1-2-4-6-8)
Natale Machine & Tool Co 339 Highway #17 Carlstadt NJ (8)
●NORTH AMERICAN ELECTRIC LAMP CO 1520 North 13th St St Louis 6 Mo (2-4-7-10)—ADV PG 128
Northern Incandescent Lamp Co 1 Newark St Hoboken NJ (1-2-4-6)
Penetray Corp 615 Front St Toledo 5 Ohio (1-2-4-5-6-8)
Pyrosil Inc 1889 Front St Cuyahoga Falls Ohio (4)
Radiant Lamp Corp 300 Jeliff Ave Newark 8 NJ (1-4-8-9)
Signalite Inc 37-41 Neptune Highway Neptune NJ (3)
Solar Electric Corp 121 Central Ave Warren Pa (1-2-4-6)
Star-A Electric Mfg Co Inc 269 Meserole St Brooklyn 6 NY (1-6-8)
Sylvania Electric Products Inc 730 Third Ave New York 19 NY (1-2-3-4-7-8)
Ultra-Violet Products Inc 5114 Walnut Grove Ave San Gabriel Calif (5)
Weiss & Biheller Merchandise Corp 40 W 20 St New York 11 NY (10)
Westinghouse Electric Corp P O Box 2278 Pittsburgh 30 Pa (10-11)
Westinghouse Electric Corp Lamp Div Bloomfield NJ (1 thru 9)
●WESTINGHOUSE ELECTRIC SUPPLY CO 3 Gateway Center (Box 448) Pittsburgh 30 Pa (1-2)—ADV PG 2nd Cover
Westron Corp 652 Hudson St NY 14 NY (1-2-6-8-10)

9H. LIGHTING SYSTEM ACCESSORIES

1. Reflectors
2. Louvers & diffusers
3. Glassware
4. Panels
5. T-bars & supports
6. Gimbal rings

For use with suitable sockets or fixtures or for area and ceiling lighting systems.

Abolite Lighting Div Jones Metal Products Co West Lafayette Ohio (1-2)
Abrams Lighting 785 Schuykill Ave Philadelphia 46 Pa (1)
Acme Lighting & Mfg Co 949 E 31 St Los Angeles 11 Calif (1)
Afco Lite Corp 1378 N Wolcott Chicago 22 Ill (1)
Alexander-Tagg Industries Inc Jacksonville Road at Summit Ave Hatboro Pa (6)
All-Brite Light Co 400 S 12 St Reading Pa (1)
●AMERICAN LOUVER CO 53 N Elston Ave Chicago 30 Ill (2)—ADV PG 101
Artcraft Lighting Co Inc 248 McKibben St Brooklyn 6 NY (1)
B M D & R Inc 7020 Walker St St Louis Park Minneapolis 16 Minn (1)
Benjamin Div Thomas Industries Inc 207 E Broadway Louisville 2 Ky (1)
Canning-Pekara Inc 2144 N Wood St Chicago 14 Ill (1-2)
Capitol Stage Lighting Co Inc 527 W 45 St New York 36 NY (1)
Ceiling Materials Co 200 Waring Rd Memphis 17 Tenn (5)
Cold Cathode Lighting Corp 76 S Bayles Ave Port Washington NY (1)
Cole (C W) & Co Inc P O Box 3382 Los Angeles 54 Calif (1)
Columbia Electric & Mfg Co North 2310 Fancher Way Spokane Wash (2)
Compco Corp 1800 N Spaulding Ave Chicago 47 Ill (1)
Corning Glass Works Corning NY (3-4)
Crownlite Fluorescent Co 7 Roselle St Mineola NY (1)
Curtis Lighting Div Curtis-All Brite Lighting Inc 6135 W 65 St Chicago 38 Ill (1)
Cutler Light Mfg Co 2026 N 22 St Phila 21 Pa (1)
Derrick Light & Equipment Co 1201 E Daggett (P O Box 414) Fort Worth Tex (1)
Electro Lighting Corp 1536 S Paulina St Chicago 8 Ill (1)
Erie Glass Mfg Co 564 Union Trust Bldg Pittsburgh 19 Pa (3)
Fannon (John J) Products Co 3000 E Woodbridge Detroit 7 Mich (4)
Frink Corp 211 63rd St Brooklyn 20 NY (1-2)
General Lighting Co 248 McKibbin St Brooklyn 6 NY (1)
Great Northern Mfg Corp 1056 N Wood St Chicago 22 Ill (1)
Gruber Bros Inc 125 South First St Brooklyn 11 NY (1)
Guth (Edwin F) Co 2615 Washington Blvd St Louis 3 Mo (1-2)
Hall (William) Co Canal Bank Windsor Locks Conn (5)
Hexcel Products Inc 2332 4th St Berkeley 10 Calif (2)
Holophane Co Inc 342 Madison Ave New York 17 NY (1-3)
House-O-Lite Corp 2430 S Ashland Ave Chicago 8 Ill (1-2)
Iso Industries 600 E Turner St Los Angeles 12 Calif (4)
Jackson Electrical Co 900 W Van Buren St Chicago 7 Ill (1)
Joleco Corp 2513 Baldwin St St Louis 6 Mo (1-2)
K-B Lighting Mfg Co 2101 Byberry Rd Phila 16 Pa (1)
Keystone Electric Mfg Co 2228 E Tioga St Phila 34 Pa (1)
●KILLARK ELECTRIC MFG CO 3940 Easton Ave St Louis 13 Mo (1)—ADV PG 78-79
Kliegl Bros Universal Electric Stage Lighting Co Inc 321 W 50 St NY 19 NY (1)
Kurtzon (Morris) Inc 1420 S Talman Ave Chicago 8 Ill (1)
L & P Lighting Box 157 Olive Branch Miss (1)
Lancaster Glass Corp Lancaster Ohio (3)
Lee-Bert Inc 900 Lapeer St Saginaw Mich (4)
Lightonics P O Box 7211 Oakland 1 Calif (2-4)
Line Material Industries McGraw-Edison Co 700 W Michigan St Milwaukee Wis (1)
McKee Div Thatcher Glass Mfg Co Inc Jeannette Pa (3)
Mid-West Chandelier Co 15th & Gentry (P O Box 7365) North Kansas City 16 Mo (3)
Midwest Lighting Products Co P O Box 536 Edgewater Branch Cleveland 7 Ohio (1)
Miller Co Illuminating Div 99 Center St Meriden Conn (1-2)
MiroFlector Co Inc 40 Bayview Ave Inwood LI NY (1)
Modern Light Co Inc 7809 Maplewood Industrial Court St Louis 17 Mo (1)
Multi Electric Mfg Inc 4223 W Lake St Chicago 24 Ill (1)
National Cathode Corp 317 E 34 St New York 16 NY (1)
Overbagh & Ayres Mfg Co 411 S Clinton St Chicago 7 Ill (1)
Pittsburgh Reflector Co Oliver Bldg Mellon Square Pittsburgh 22 Pa (1)
●POWER-STRUT DIV VAN HUFFEL PRODUCTS INC Dietz Rd Warren Ohio (5)—ADV PG 93
Quadrangle Mfg Co 32 S Peoria St Chicago 7 Ill (1)
Rab Electric Mfg Co Inc 605 E 132 St New York 54 NY (1)
Ruby-Philite Corp 32-02 Queens Blvd LIC 1 NY (1-2)
Russell & Stoll Co Inc 125 Barclay St NY 7 NY (1)
Spero Electric Corp 20500 St Clair Ave Cleveland 17 Ohio (1)
Stabrite Fluorescent Mfg Co 3550 Northwest 49 St Miami Fla (1)
Standard Portable Cord Co Inc Mayville NY (1)
Steber Div Pyle-National Co 2700 Roosevelt Rd Broadview Ill (1)
Supreme Lighting Co 600 E Turner St Los Angeles Calif (4)
Swivelier Co Inc Nanuet NY (1)
United Lighting & Ceiling Co 2828 Ford St Oakland 1 Calif (2-4-5)
Versen (Kurt) Co 4 Slocum Ave Englewood NJ (1-2)
Weiss & Biheller Merchandise Corp 40 W 20 St New York 11 NY (3)
Westinghouse Electric Corp Lighting Div 1216 W 58th St (P O Drawer 5817) Cleveland 1 Ohio (1)
Westinghouse Electric Corp P O Box 2278 Pittsburgh 30 Pa
Yorkville Metal Products Co 627 Greenwich St New York 14 NY (1)

9J. MISCELLANEOUS LIGHT SOURCES

1. Radioisotope excited
2. Electroluminescent panels

Sylvania Electric Products Inc 730 Third Ave New York 19 NY (2)
United States Radium Corp Hanover Ave Morristown NJ (2)
Westinghouse Electric Corp P O Box 2278 Pittsburgh 30 Pa (2)
Westinghouse Electric Corp Lamp Div Bloomfield NY (2)

TECHNICAL LITERATURE

To obtain the following literature, enter the appropriate Code Numbers* on the Free Information cards elsewhere in this issue.

*Code No.	Description, Pages Catalog No. & Mfr.
9-1	Lighting Equipment; 40p (Afco Lite)
9-2	Shallow Line Troffers; 52p; Cat. Sec. A (Benjamin)
9-3	Lumi-flo Troffers; 44p; Cat. Sec. B (Benjamin)
9-4	Commercial Fluorescent Lighting; 20p; Cat. Sec. C (Benjamin)
9-5	Sky-Glo Illuminated Ceilings; 20p; Cat. Sec. D (Benjamin)
9-6	Industrial Fluorescent Lighting; 20 p; Cat. Sec. F (Benjamin)
9-7	Industrial Incandescent Lighting; 32p; Cat. Sec. G (Benjamin)
9-8	Protected Lighting; 20p; Cat. Sec. I (Benjamin)
9-9	Floodlighting; 24 p; Cat. Sec. J (Benjamin)
9-10	Commercial Lighting; 20p; Cat. No. 18 (Capitol)
9-11	Stage Lighting Apparatus; 49p; Cat. No. 31-F-25
9-12	Pilot Lights; 23p; Cat. No. L-161-B (Dialight)
9-13	Incandescent Lighting Fixtures; 19p; Cat. No. G-2 (Gill)
9-14	Engineered Lighting and Control Equipment; 44p; Cat. No. 101 (Hub)
9-15	Fluorescent Lighting Fixtures; 44p (Joleco)
9-16	Architectural Lighting Data; 34p (Kent)
9-17	Seamless Round Taped Aluminum Lighting Standards; 23p (Kerrigan)
9-18	Octagonal Lighting Standards; 41p (Kerrigan)
9-19	Traffic Signal Standards; 13p (Kerrigan)
9-20	Street Lighting; 19p (Kerrigan)
9-21	Brackets and Mast Arms; 13p (Kerrigan)
9-22	Television Lighting; 28p; Cat. No. TV-6 (Kliegl)
9-23	Theatrical Lighting; 83p; Cat. No. T-61 (Kliegl)
9-24	Architectural Lighting; 35p; Cat. No. A-11 (Kliegl)
9-25	Safety & Signal Lanterns; 19p; Cat. No. 586 (Larco)
9-26	Lighting Equipment; 62p (Magni-Flood)
9-27	Lighting Fixtures; 28p (Meierjohan-Wengler)
9-28	Versaline and Aluminum Troffers; 26p (Miller)
9-29	Commercial Fluorescent Luminaires; 36p (Miller)
9-30	Industrial Fluorescent Luminaires; 12p (Miller)
9-31	Industrial Lighting Equipment; 38p (Miller)
9-32	Lighting Equipment; 59p; Cat. No. M-165 (Moe Light)
9-33	Circle D Lights; 12p; Cat. No. 2 58-20 (Natale)
9-34	Engineered Incandescent Lighting; 71p; Cat. No. 956 (Perfeclite)
9-35	Contemporary Lighting; 16p; Cat. No. 59-C (Perfeclite)
9-36	Lighting Fixtures; 12p; Cat. No. L-58 (Perfect-Line)
9-37	Boxes and Fittings; 10p; Cat. Sec. E (Stonco)
9-38	Vaportight Lighting; 12p; Cat. Sec. F (Stonco)
9-39	Underwater Lighting; 10p; Cat. Sec. G (Stonco)
9-40	Sealed Beam Lighting; 44p; Cat. Sec. B (Stonco)
9-41	Emergency Portable Lighting; 10p; Cat. Sec. H (Stonco)
9-42	Decorative Architectural Lighting; 16p; Cat. Sec. A (Stonco)
9-43	Incandescent Lighting; 22p; Cat. No. 611 (Trojan)
9-44	Lighting Equipment; 33p (Wakefield)

SECTION 10. SIGNAL, COMMUNICATING & INDICATING EQUIPMENT

Many of the indicating devices listed below are closely related to industrial processing controls listed in Section 3.

10A. METERS

1. **Ammeters, voltmeters & volt-ammeters**
2. **Kva meters**
3. **Light meters**
4. **Demand meters**
5. **Fluxmeters**
6. **Galvanometers**
7. **Kilowatt-hour meters**
8. **Ohmmeters**
9. **Recording-type meters**
10. **Power factor meters**
11. **Tachometers**
12. **Varmeters**
13. **Wattmeters**
14. **Phase angle meters**
15. **Electrolysis meters**
16. **Frequency meters**
17. **Electrostatic meters**
18. **V brat on meters**
19. **High-voltage test meters**
20. **Potentiometers**
21. **Clamp-on (snap-around) meters**
22. **Potential devices**

Aero Instrument Co 11423 Vanowen St North Hollywood Calif (16)
Airserco Mfg Co Inc 435 Melwood St Pittsburgh 13 Pa (1)
Allen Electric and Equipment Co 2101-2117 N Pitcher St Kalamazoo Mich (1-11)
Amprobe Instrument Corp 630 Merrick Rd Lynbrook NY (1-9-21)
Anchor Mfg Co P O Box 959 Manchester NH (22)
Assembly Products Inc Chesterland 31 Ohio (1)
Associated Research Inc 3789 W Belmont Ave Chicago 18 Ill (11)
Beede Electrical Instrument Co Inc Penacook NH (1-6-8-13)
Bergen Laboratories Inc 60 Spruce St Paterson 1 NJ (1-8)
Biddle (James G) Co 1316 Arch St Phila 7 Pa (2-6-8-11-16)
Bliss Electronic Corp Sussex NJ (1-8-27)
Bodendieck Tool Co P O Box 499 Taylorville Ill (19)
Borden Engineering Div M J Johnson Aircraft Engineering Co Box 10 Morristown NJ (6)
Burton-Rogers Co 42 Carleton St Cambridge 42 Mass (1)
●**COLUMBIA ELECTRIC MFG CO 4519 Hamilton Ave Cleveland 14 Ohio (1)—ADV PG 118**
Continental-Wirt Electronics Corp 26 W Queen Lane Philadelphia 44 Pa (20)
Cutler-Hammer Inc 228 N 12 St Milwaukee 1 Wis (9)
Davenport Mfg Div Duncan Electric Co Inc 2532 N Elston Ave Chicago 47 Ill (1-8)
Davis Electric Co 28 Parker St Wallingford Conn (8)
Daystrom Inc Weston Instruments Div 814 Frelinghuysen Ave Newark 12 NJ (1-2-5-6-8-10-11-13)
DeJur-Amsco Corp 4501 Northern Blvd Long Island City 1 NY (1-9)
Duncan Electric Mfg Co Lafayette Ind (4-7)
Durant Mfg Co 1900 N Buffum St Milwaukee 1 Wis (11)
Eastern Specialty Co 3617 N 8th St Phila 40 Pa (8-14-22)
Electric Re-Light Co Uniman Pl at S Goodman Rochester 20 NY (7)
Electric Tachometer Corp 68th & Upland Sts Phila 42 Pa (11)
Electro-Mechanical Instrument Co 8th & Chestnut Sts Perkasie Pa (1)
Electro-Mechano Co 241 E Erie St (EM) Milwaukee 2 Wis (11)
EPCO Electronics Inc 140 Liberty St NY 6 NY (1-8)
Erwood Inc 1770 Berteau Ave Chicago 13 Ill (18)
Esterline-Angus Instrument Co P O Box 596 Indianapolis 6 Ind (1-9-10-11-12-13-16)
Fleron (M M) & Son 1220 Yardley Rd Morrisville Pa (8)
General Controls Co 801 Allen Ave Glendale Calif (9)
General Electric Co Apparatus Sales Schenectady 5 NY (1-4 thru 16)
●**GENERAL ELECTRIC SUPPLY CO 1260 Boston Ave Bridgeport Conn (1-2-4-7 thru 10-13)—ADV PG 84-85**
General Radio Co West Concord Mass (8-11)
Gray Instrument Co Mill Rd Audalusia Pa (9)
●**GRAYBAR ELECTRIC CO INC 420 Lexington Ave NY 17 NY (1)—ADV PG 2**
Greibach Instruments Corp 315 North Ave New Rochelle NY (1-8)
Hewson Co Inc 115 Maple St Summit NJ (8)
Hickok Electrical Instrument Co 10614 Dupont Ave Cleveland 8 Ohio (1-2-4-5-6-8-10-12-13-14-16)
Holtzer-Cabot Div National Pneumatic Co Inc 125 Amory St Boston 19 Mass (8)
Howell Instruments Inc 3479 W Vickery Blvd Fort Worth 7 Tex (1-2-6-8-9-16)
Hoyt Electrical Instrument Works 42 Carleton St Cambridge 42 Mass (1)
Ideal Industries Inc 5136 Park Ave Sycamore Ill (11)
Industrial Devices Inc Edgewater 19 NJ (1)
Industrial Instruments Inc 89 Commerce Rd Cedar Grove NJ (2-8)
Industrial Transformer Corp Gouldsboro Pa (8)
Jones Motrola Corp 432 Fairfield Ave Stamford Conn (11)
Kay Electric Co Maple Ave Pine Brook NJ (1)
Kin Tel Div Cohu Electronics Inc 5725 Kearney Villa Rd San Diego 12 Calif (1-6)
Knopp Inc 1307 66th St Oakland 8 Calif (17)
Leeds & Northrup Co 4970 Stenton Ave Phila 44 Pa (6-8-9)
Leitch-Huard Corp Stark & Commercial Sts Manchester NH (1)
Lewis Engineering Co 52 Rubber Ave Naugatuck Conn (9)
Manning Maxwell & Moore Inc 250 E Main St Stratford Conn (1)
Marion Instrument Div Minneapolis-Honeywell Regulator Co Grenier Field Manchester NH (1-22)
Martindale Electric Co 1383 Hird Ave Cleveland 7 Ohio (1-11-13)
Meters Inc 5353 N Keystone Ave Indianapolis 20 Ind (1-2-8)
Metron Instrument Co 432 Lincoln St Denver 3 Colo (11)
Minneapolis-Honeywell Regulator Co Boston Div 40 Life St Boston 35 Mass (6)
Minneapolis-Honeywell Regulator Co Industrial Div Wayne & Windrim Aves Phila 44 Pa (1-4-6-9-10-11-12-13)
Partlow Corp 230 Campion Rd New Hartford NY (9)
Peschel Electronics Inc RFD #1 Patterson NY (8)
Radio Frequency Laboratories Inc Boonton NJ (22)
Rattray (George) & Co Inc 101 New South Rd Hicksville NY (9)
S & C Electric Co 4435 Ravenswood Ave Chicago 40 Ill (22)

Sangamo Electric Co 11th & Converse Springfield Ill (1-2-4-7-9-12-13)
Sensitive Research Instrument Corp 310 Main St New Rochelle NY (1-5-6-10-13-16-20)
Shallcross Mfg Co Preston St Selma NC (2-6-8-9-15)
Shurite Meters 130 Wallace St New Haven 8 Conn (1)
Simpson Electric Co 5200 W Kinzie St Chicago 44 Ill (1-6-8-13)
Snap-On-Tools Corp 8028 28th Ave Kenosha Wis (11-21)
Southwestern Industrial Electronics Co 10201 Westheimer (P O Box 22187) Houston 27 Tex (1-6-8-11)
Standard Electric Time Co 89 Logan St Springfield 2 Mass (11)
States Co 19 New Park Ave Hartford 6 Conn (22)
Sticht (Herman H) Co Inc 27 Park Place New York 7 NY (1-8-11-16)
Technology Instrument Corp 531 Main St Acton Mass (14)
Trio Laboratories Inc Expressway Industrial Park Plainview NY (1-14)
Triplett Electrical Instrument Co 286 Harmon Rd Bluffton Ohio (1-2-8-13)
U S Gauge Div American Machine & Metals Inc Clymer Ave Sellersville Pa (1)
Wac Line Inc 35 S St Clair St Dayton 2 Ohio (1-11-16)
Weksler Instrument Corp 195 E Merrick Rd Freeport LI NY (9)
Western Electro-Mechanical Co Inc 300 Broadway Oakland 7 Calif (1-10-14)
Westinghouse Electric Corp P O Box 2278 Pittsburgh 30 Pa (1-2-4-6 thru 14-16)
●WESTINGHOUSE ELECTRIC SUPPLY CO 3 Gateway Center (Box 448) Pittsburgh 30 Pa (1-4) —ADV PG 2nd Cover
Yokogawa Electric Works Inc 40 Worth St New York 13 NY (1-11-13)
Zernickow (O) Co 15 Park Row New York 38 NY (11)

10B. INDICATORS & ALARMS

1. **Annunciators**
2. **Bin level**
3. **Blown fuse**
4. **Revolution**
5. **Current failure**
6. **Fault & ground**
7. **Photoelectric**
8. **Liquid level**
9. **Peak load**
10. **Phase sequence**
11. **Smoke**
12. **Synchroscopes**
13. **Temperature**
14. **Lamp failure**
15. **Sound level**
16. **Liquid-flow**
17. **Counting devices**
18. **Sprinkler alarms**
19. **Elapsed time**
20. **Fire alarm detectors**

For associated controls, see "Controls" & "Control Switches" in Section 3.

Abrams Instrument Corp 606 E Shiawasee St Lansing Mich (17)
Acoustica Associates Inc 10400 Aviation Blvd Los Angeles 45 Calif (8)
Acme Fire Alarm Company Inc 106 Seventh Ave New York 11 NY (1-6)
American District Telegraph Co 155 Sixth Ave New York 13 NY (11-18-20)
American Sentry Inc 84 Bethlehem Pike Philadelphia 18 Pa (7-11-13)
Assembly Products Inc Chesterland 31 Ohio (13)
Associate Reseach Inc 3789 W Belmont Ave Chicago 18 Ill (10)
Auth Electric Co Inc 34-20 45th St LIC 1 NY (1-6)
●AUTOCALL CO 58 Warden Ave Shelby Ohio (1-17)—ADV PG 110
Automatic Control Co 995 University Ave St Paul 4 Minn (1-5-8-13)
Automatic Devices Div American Machine & Metals Inc Sellersville Pa (13)
Automatic Timing & Controls Inc King of Prussia Pa (2-4-8-17-19)
Automation Products Inc 3030 Max Roy St Houston 24 Tex (8)
B/W Controller Corp 2200 E Maple Rd Birmingham Mich (8)
Bailey Meter Co 1050 Ivanhoe Rd Cleveland 10 Ohio (8-11-13)
Bergen Laboratories Inc 60 Spruce St Paterson 1 NJ (19)
Biddle (James G) Co 1316 Arch St Phila 7 Pa (6)
Bin-Dicator Co 13946-212 Kercheval Ave Detroit 15 Mich (2-8)
Bogue Electric Mfg Co 52 Iowa Ave Paterson 3 NJ (8-13)
Borden Engineering Div M J Johnson Aircraft Engineering Co Box 10 Morristown NJ (6)
Brundee Co 48 Hale St Cranford NJ (6)
Brunswick Instruments P O Box 813 New Brunswick NJ (10)
Burling Instrument Co Inc 16 River Rd Chatham NJ (13)
Central Station Signals Inc 53 W 23 St New York 10 NY (5-8-11-13)
Clark Controller Co 1146 E 152 St Cleveland 10 Ohio (9-11)
Com-Pak-Ett Mfg Corp 650 Grand St Allegan Mich (17)
Convair Inc P O Box 9671 Pittsburgh 16 Pa (2)
Couch (S H) Co Inc 3 Arlington St North Quincy 71 Mass (1)
Counter & Control Corp 4503 W Brown Deer Rd Milwaukee 23 Wis (4-17)
Crouse-Hinds Co Syracuse 1 NY (6-8)
Cutler-Hammer Inc 228 N 12 St Milwaukee 1 Wis (7-8-13)
Davenport Mfg Div Duncan Electric Co Inc 2532 N Elston Ave Chicago 47 Ill (6-10)
Daystrom Inc Weston Instruments Div 614 Frelinghuysen Ave Newark 12 NJ (13)
Designers for Industry Inc 4241 Fulton Pkwy Cleveland 9 Ohio (13-19-20)
Dietz (Henry G) Co Inc 12-16 Astoria Blvd Long Island City 2 NY (8)
Durant Mfg Co 1900 N Buffum St Milwaukee 1 Wis (17)
Dwyer (F W) Mfg Co Woodland at Greenwood (P O Box 373) Michigan City Ind (8)
Eastern Specialty Co 3617 N 8th St Phila 40 Pa (10)
Edwards Co Inc Norwalk Conn (1-20)
Electric Tachometer Corp 68th & Upland Sts Phila 42 Pa (4)
Electro Devices Inc 4648 Easton Ave St Louis 13 Mo (1)
Electro-Mechanical Instrument Co 8th & Chestnut Sts Perkasie Pa (5)
Electronic Control Corp 15341 Dale Detroit 23 Mich (7-11)
Electronics Corp of America One Memorial Dr Cambridge Mass (7-8-11)
Ellenco Inc 3322 M St N W Washington 7 DC (1-6-11-13)
Excel Electric Service Co Inc 2113 S Western Ave Chicago 8 Ill (6)
Faraday Inc 2011 W Beecher Rd Adrian Mich (1)
Fenwal Inc Pleasant St Ashland Mass (13)
Fischer & Porter Co 335 Warminster Rd Hatboro Pa (1-7-8-13-16)
Fisher Research Laboratory Inc 1961 University Ave Palo Alto Calif (8)
General Controls Co 801 Allen Ave Glendale Calif (4-8-13)
General Electric Co Apparatus Sales Schenectady 5 NY (4 thru 13)
Glo-Lite Instrument Co 152 Watson Ave Newark 12 NJ (6-10)
Globe Industries Inc 1784 Stanley Ave Dayton 4 Ohio (17-19)
Haledy Electronics Co 57 William St NY 5 NY (7-8-16-17)
Healy-Ruff Co Water Level Controls Div 2255 University Ave St Paul 14 Minn (8)
Heat-Timer Corp 657 Broadway New York 12 NY (13)
Hewitt-Robins 666 Glenbrook Rd Stamford Conn (2)
Hewson Co Inc 443 Broad St Newark 2 NJ (6)
Hickok Electrical Instrument Co 10614 Dupont Ave Cleveland 8 Ohio (13)
Howell Instruments Inc 3479 W Vickery Blvd Fort Worth 7 Tex (13)
Hughey & Phillips Inc 3200 North San Fernando Blvd Burbank Calif (14)
Illinois Testing Laboratories Inc 420 N LaSalle St Chicago 10 Ill (13)
Industrial Devices Inc Edgewater 19 NJ (3)
Industrial Instruments Inc 89 Commerce Rd Cedar Grove NJ (2)
Instrument Laboratories 315 W Walton Pl Chicago 10 Ill (6)
Jeffrey Mfg Co 832 N 4 St Columbus 16 Ohio (2)
Jordan Co Inc 3235 West Hampton Ave Milwaukee 9 Wis (7)
Kidde Ultrasonic & Detection Alarms Div Walter Kidde & Co Inc 459 Brighton Rd Clifton NJ (7-13)
Kirkland (H R) Co 8 King St Morristown NJ (1)
Knopp Inc 1307 66th St Oakland 8 Calif (10)
Kurman Electric Co 191-193 Newel St Brooklyn 22 NY (7)
Larson Instrument Co 24 Orchard St Tarrytown NY (5-13)
Leeds & Northrup Co 4970 Stenton Ave Phila 44 Pa (6-11-13)
Magnetrol Inc 2110 S Marshall Blvd Chicago 23 Ill (8)
Manning Maxwell & Moore Inc 250 E Main St Stratford Conn (8-13)
Marsh (Jas P) Crop 3501 Howard St Skokie Ill (13)
McDonnell & Miller Inc 3500 N Spaulding Ave Chicago 18 Ill (8)
Mercoid Corp 4201 W Belmont Ave Chicago 41 Ill (13)
Minneapolis-Honeywell Regulator Co 2753 Fourth Ave S Minneapolis 8 Minn (4)
Minneapolis-Honeywell Regulator Co Industrial Div Wayne & Windrim Aves Phila 44 Pa (7-8-13)
Nelson Electric Mfg Co P O Box 5385 Tulsa Okla (6)
New Jersey Meter Co Inc 350 Leland Ave Plainfield NJ (16)
O'Brien Electric Corp 6514 Santa Monica Blvd Hollywood 38 Calif (1)
Opad Electric Co 43 Walker St New York 13 NY (6-10)
Panalarm Div Panellit Inc 7401 N Hamlin Ave Skokie Ill (1)
Panellit Div ISI Inc 7401 N Hamlin Ave Skokie Ill (1)
Parr Mfg Corp 48 Hale St Cranford NJ (6)
Partrick & Wilkins Co 51 N Seventh St Phila 6 Pa (1)
Peschel Electronics Inc RFD #1 Patterson NY (5-6)
Photobell Co Inc 43 Vesey St New York 7 NY (8-11)
Photomation Inc 96 S Washington Ave Bergenfield NJ (2-4-7-11-16)
Portable Light Co Inc 65 Passaic Ave Kearny NJ (7)
Post Electronic Products 12 Lothrop St Beverly Mass (17)
Pyrometer Instrument Co Bergenfield NJ (13)
Russell & Stoll Co Inc 125 Barclay St NY 7 NY (6)
Scam Instrument Corp 3101 N Lowell Ave Chicago 41 Ill (1)
Scott (H H) Inc 111 Powder Mill Rd Maynard Mass (15)
Scrayco Mfg Co 201 Greene Ave Middlesex NJ (2)
Sell (H H) Electric Co 3240 Dakota Ave Minneapolis 16 Minn (10)
Shallcross Mfg Co Preston St Selma NC (6)
Simmonds Precision Products Inc Tarrytown NY (8)
Standard Electric Time Co 89 Logan St Springfield 2 Mass (1-4)
Stewart Bros Div Instrument Laboratories 315 W Walton Pl Chicago 10 Ill (6)
Sticht (Herman H) Co Inc 27 Park Place New York 7 NY (10-19)
Superior Interlock Corp 73-39 Central Ave Glendale 27 NY (1)
Tigerman Engineering Co 4332 N Western Ave Chicago 18 Ill (1)
Tobe Deutschmann Corp Providence Highway Norwood Mass (6)
Trimount Instrument Div General Controls Co 8080 McCormick Blvd Skokie Ill (8)
United Mfg Div W L Maxson Corp 41 Halg St Hamden 14 Conn (10)
U S Gauge Div American Machine & Metals Inc Clymer Ave Sellersville Pa (13)
Veeder-Root Inc 70 Sargeant St Hartford 2 Conn (17)
Vemaline Products Co 511 Commerce St Franklin Lake NJ (17)
Viking Instruments Inc East Haddam Conn (1-8-13)
Walkirt Co 141 W Hazel St Inglewood 3 Calif (17)
Wallace & Tiernan Inc 25 Main St Belleville NJ (7-8)
Warrick (Chas F) Co 1964 W Eleven Miles Rd Berkley Mich (8)
Weksler Instruments Corp 195 E Merrick Rd Freeport L I NY (13)
West Instrument Corp 4363 W Montrose Ave Chicago 41 Ill (13)
Western Electro-Mechanical Co Inc 300 Broadway Oakland 7 Calif (10)
Westinghouse Electric Corp P O Box 2278 Pittsburgh 30 Pa (1-6-7-8)
White-Rodgers Co 9797 Reavis Rd St Louis 23 Mo (13)
Yellow Springs Instrument Co Inc P O Box 106 Yellow Springs Ohio (13)

10C. TESTERS & LOCATORS

1. **Growlers**
2. **Circuit analyzers**
3. **Protective device analyzers**
4. **Magnetos**
5. **Dynamometers**
6. **Continuity testers**
7. **Fluorescent unit testers**
8. **Insulation testers**
9. **Turns-ratio testers**
10. **Polarity testers**
11. **Cable, metal & outlet locators**
12. **Cable fault locators**
13. **Voltage testers**
14. **Coil testers**
15. **Bridges**
16. **Ground resistance testers**
17. **Stroboscopes**
18. **Oscilloscopes**
19. **Relay testers**
20. **Corona testers**
21. **Dielectric testers**
22. **Low-resistance testers**
23. **Neon testers**
24. **System analyzers**
25. **Motor analyzers**
26. **Contact resistance testers**
27. **Capacitor aging testers**
28. **Cable tracers**

Airserco Mfg Co Inc 435 Melwood St. Pittsburgh 13 Pa (2)
Allen Electric and Equipment Co 2101-2117 N Pitcher St Kalamazoo Mich (25)
Amprobe Instrument Corp 630 Merrick Rd Lynbrook NY (28)
Associated Research Inc 3789 W Belmont Ave Chicago 18 Ill (8-12-16-20)
Berkshire Laboratories 942 Bank Village Greenville NH (17)
●BIDDLE (JAMES G) CO 1316 Arch St Phila 7 Pa (8-9-16-20-21)—ADV PG 90
Bliss Electronic Corp Sussex NJ (2-19-26)
Bogue Electric Mfg Co 52 Iowa Ave Paterson 3 NJ (2)
Borden Engineering Div M J Johnson Aircraft Engineering Co Box 10 Morristown NJ (2-8-11)
Bright Star Industries 600 Getty Ave Clifton NJ (6)
Brundee Co 48 Hale St Cranford NJ (11-12)
Cincinnati Clock & Instrument Co 1117 Harrison Ave Cincinnati 14 Ohio (3)
Davenport Mfg Div Duncan Electric Co Inc 2532 N Elston Ave Chicago 47 Ill (2-8)
Designers for Industry Inc 4241 Fulton Pkwy Cleveland 9 Ohio (2-6-12-18)
Dice (J W) Co Englewood NJ (6-10-22)
Eagle Electric Mfg Co Inc 23-10 Bridge Plaza South Long Island City 1 NY (2-23)
Fisher Research Laboratory Inc 1961 University Ave Palo Alto Calif (11)
G-C Electronics Co 400 S Wyman St Rockford Ill (23)
General Electric Co Apparatus Sales Schenectady 5 NY (2-3-4-5-8)
General Radio Co West Concord Mass (15-17)
Glodak Co Inc 1544 W Glenoaks Blvd Glendale 1 Calif (11)
Gray Instrument Co Mill Rd Andalusia Pa (15)
Haydon (A W) Co 4060 Ince Blvd Culver City Calif (24)
Hickok Electrical Instrument Co 10614 Dupont Ave Cleveland 8 Ohio (5-17-18)
Holub Industries Inc 442 Elm St Sycamore Ill (6)
●IDEAL INDUSTRIES INC 5136 Park Ave Sycamore Ill (2-8-13)—ADV PG 103
Industrial Development Labs Inc 982 River Rd Edgewater NJ (15)
Instrument Laboratories 315 W Walton Pl Chicago 10 Ill (2)
Jackson Electrical Instrument Co 124 McDonough St Dayton 2 Ohio (2-18)
Kay Electric Co Maple Ave Pine Brook NJ (2)
Leeds & Northrup Co 4970 Stenton Ave Phila 44 Pa (15)
Martindale Electric Co 1383 Hird Ave Cleveland 7 Ohio (1-2-8-13-14)
Meters Inc 5353 N Keystone Ave Indianapolis 20 Ind (2)
MULTI-Amp Div Multi-Amp Electronic Corp 465C Lehigh Ave Union NJ (3-6-8-19-21-22)
Nankervis (Geo L) Co 15300 Fullerton Ave Detroit 27 Mich (5)
Network Industries Inc P O Box 397 Bayonne NJ (8-13-15)
Opad Electric Co 43 Walker St New York 13 NY (8)
Parr Mfg Corp 48 Hale St Cranford NJ (11)
Peschel Electronics Inc RFD #1 Patterson NY (2)
Plaster-Eye Co 2560 Noblestown Rd Pittsburgh 5 Pa (11-12)
Potter & Rayfield Inc P O Box 1042 Atlanta Ga (1-5)
Principle Research & Development Corp 200 Citizens Bldg Aberdeen SD (12)
Rogers Electric Laboratories 2651 Shaker Rd Cleveland Heights 18 Ohio (11)
Schauer Mfg Corp 4500 Alpine Ave Cincinnati 42 Ohio (1)
Sensitive Research Instrument Corp 310 Main St New Rochelle NY (12)
Shallcross Mfg Co Preston St Selma NC (11)
Simpson Electric Co 5200 W Kinzie St Chicago 44 Ill (2-8-18)
Sittler Corp 18 N Ada St Chicago 7 Ill (2)
Slaughter Co College & Young Sts Piqua 5 Ohio (8-17)
Snap-On-Tools Corp 8028 28th Ave Kenosha Wis (1)
Sorensen & Co Richards Ave South Norwalk Conn (12)
Southwestern Industrial Electronics Co 10201 Westheimer (P O Box 22187) Houston 27 Tex (15)
Speedex Mfg Co 418 S Wyman St Rockford Ill (2)
Standard Electric Time Co 89 Logan St Springfield 2 Mass (5)
States Co 19 New Park Ave Hartford 6 Conn (19)
Stewart Bros Div Instrument Laboratories 315 W Walton Pl Chicago 10 Ill (2-11)
Sticht (Herman H) Co Inc 27 Park Pl New York 7 NY (2-6-8-13-15-16-17)
Tektronix Inc P O Box 500 Beaverton Ore (18)
Triplett Electrical Instrument Co 286 Harmon Rd Bluffton Ohio (18)
United States Rubber Co 1230 Avenue of the Americas New York 20 NY (11)
Von Corp 1036-40 Lomb Ave S W (P O Box 3566) Birmingham Ala (8-12)
Waterman Products Co Inc 2445-63 Emerald St Phila 25 Pa (18)
Waveland Electric Co 5542 N Ashland Ave Chicago 40 Ill (1)
Westinghouse Electric Corp P O Box 2278 Pittsburgh 30 Pa (1-5)
●WESTINGHOUSE ELECTRIC SUPPLY CO 3 Gateway Center (Box 448) Pittsburgh 30 Pa (2)—ADV PG 2nd Cover
Whitney Blake Co 102 Pershing St New Haven 14 Conn (12)
Yokogawa Electric Works Inc 40 Worth St New York 13 NY (8-16)

10D. BURGLAR ALARM SYSTEMS

1. **Residential**
2. **Commercial & industrial**
3. **Fence & boundary**

American District Telegraph Co 155 Sixth Ave New York 13 NY (2-3)
American Sentry Inc 84 Bethlehem Pike Philadelphia 18 Pa (2)
Auth Electric Co Inc 34-20 45th St LIC 1 NY (1)
Bogen-Presto Co Route 4 & Forest Ave (P O Box 500) Paramus NJ (2)
Central Station Signals Inc 53 W 23 St New York 10 NY (1-2-3)
Edwards Co Inc Norwalk Conn (1-2)
Industrial Automation Corp 2415 W Montrose Ave Chicago Ill (1-2)
Kidde Ultrasonic & Detection Alarms Div Walter Kidde & Co Inc 459 Brighton Rd Clifton NJ (1-2-3)
Minneapolis-Honeywell Regulator Co 2753 Fourth Ave S Minneapolis 8 Minn (2-3)
Partrick & Wilkins Co 51 N Seventh St Phila 6 Pa (1-2)
Photobell Co Inc 43 Vesey St New York 7 NY (1-2-3)
Recora Co Inc Powis Rd (Box 68) St Charles Ill (1-2)
Reeve Electrical Co Inc 120 W 42nd St New York 36 NY (2)
Scott (H H) Inc 111 Powder Mill Rd Maynard Mass (2)

10E. FIRE ALARM SYSTEMS

1. **Residential**
2. **Commercial & industrial**

Acme Fire Alarm Company Inc 106 Seventh Ave New York 11 NY (2)
American District Telegraph Co 155 Sixth Ave New York 13 NY (2)
American Sentry Inc 84 Bethlehem Pike Philadelphia 18 Pa (2)
Auth Electric Co Inc 34-20 45th St LIC 1 NY (2)
●AUTOCALL CO 58 Warden Ave Shelby Ohio (2)—ADV PG 110
Castle Engineering Co P O Box 35 Seneca Castle NY (1-2)
Central Station Signals Inc 53 W 23 St New York 10 NY (2)
Couch (S H) Co Inc 3 Arlington St North Quincy 71 Mass (2)
Edwards Co Inc Norwalk Conn (1-2)
Electronics Corp of America One Memorial Dr Cambridge Mass (2)
Ellenco Inc 3322 M St N W Washington 7 DC (2)
Faraday Inc 2011 W Beecher Rd Adrian Mich (2)
●FEDERAL SIGN & SIGNAL CORP 13626 S Western Ave Blue Island Ill (2)—ADV PG 118
Fire Alarm Thermostat Corp 53 W 23 St New York 10 NY (1-2)
Fire Detective Inc 300 Chancellor Ave Newark 12 NJ (1-2)
Fyr-Fyter Co Engineering Systems Div P O Box 66 Edison NJ (2)
Gamewell Co Newton Upper Falls 64 Mass (2)
Industrial Automation Corp 2415 W Montrose Ave Chicago Ill (1-2)
International Business Machines Corp Times Equipment Div 590 Madison Ave New York 22 NY (2)
Kidde Ultrasonic & Detection Alarms Div Walter Kidde & Co Inc 459 Brighton Rd Clifton NJ (1-2)
Minneapolis-Honeywell Regulator Co 2753 Fourth Ave S Minneapolis 8 Minn (2)
National Time & Signal Corp 21800 Wyoming Ave Detroit 37 Mich (2)
Newark District Telegraph Co 372 Plane St Newark 2 NJ (2)
Partrick & Wilkins Co 51 N Seventh St Phila 6 Pa (2)
Reeve Electrical Co Inc 120 W 42nd St New York 36 NY (2)
Russell & Stoll Co Inc 125 Barclay St NY 7 NY (2)
Standard Electric Time Co 89 Logan St Springfield 2 Mass (2)
Stromberg Div General Time Corp 135 S Main St Thomaston Conn (2)
●WESTINGHOUSE ELECTRIC SUPPLY CO 3 Gateway Center (Box 448) Pittsburgh 30 Pa (1-2)—ADV PG 2nd cover
Wheelock Signals Inc Branchport Ave Long Branch NJ (2)

10F. SIGNAL & COMMUNICATION SYSTEMS

1. **Calling, paging & locating systems**
2. **In-and-out registers**
3. **Intercom systems and equipment**
4. **Public address systems**
5. **Closed circuit TV**
6. **Master antenna systems & accessories**
7. **Private telephone systems**
8. **Two-way radio systems**
9. **Sound-powered telephones**
10. **Transistorized telephones**

Adcrafters Co 325 W Huron St Chicago 10 Ill (1-3-4)
Aitken-Reed Inc 2802 Wollmer St Manitowac Wis (8)
American Sentry Inc 84 Bethlehem Pike Philadelphia 18 Pa (1-4)
Auth Electric Co Inc 34-20 45th St LIC 1 NY (1-2-3-7)
●AUTOCALL CO 58 Warden Ave Shelby Ohio (1)—ADV PG 110
Automatic Electric Co Northlake Ill (3-7)
Bell Sound Systems Inc 555 Marion Rd Columbus 7 Ohio (4)
Bliss Electronic Corp Sussex NJ (2-3-4)
Blonder-Tongue Laboratories Inc 9 Alling St Newark 2 NJ (5-6)
Bogen-Presto Co Route 4 & Forest Ave (P O Box 500) Paramus NJ (1-3-4)
Couch (S H) Co Inc 3 Arlington St North Quincy 71 Mass (1-2-3-8)
Dalmotron Co 534 Laurel St San Carlos Calif (1-3-4-6)
Designers for Industry Inc 4241 Fulton Pkwy Cleveland 9 Ohio (5)
Diamond Power Specialty Corp P O Box 415 Lancaster Ohio (5)
DuKane Corp St Charles Ill (1-3-4-7)
Edwards Co Inc Norwalk Conn (1-2-3)
Executone Inc 415 Lexington Ave New York 17 NY (1-2-3-4-7)
Fanon Electronic Industries Inc 439 Frelinghuysen Ave Newark NJ (3-7-4)
Faraday Inc 2011 W Beecher Rd Adrian Mich (2)
Feiler Engineering & Mfg Co 8026 N Monticello Ave Skokie Ill (3)
Fisher Berkeley Corp 4224 Holden St Emeryville Calif (1-3)
General Electric Co Industrial Electronics Div Technical Products Dept Electronics Park Syracuse NY (5)
Godfrey Mfg Co 1633 N Halsted St Chicago 14 Ill (3)
Hammarlund Mfg Co Inc 460 W 34 St NY 1 NY (8)
●HOSE-McCANN TELEPHONE CO INC 25th St & 3rd Ave Brooklyn 32 NY (3-9)—ADV PG 122
Insul-8-Corp 1369 Industrial Rd San Carlos Calif (5)
International Business Machines Corp Times Equipment Div 590 Madison Ave New York 22 NY (7)
International Telephone & Telegraph Corp Industrial Products Div 15191 Bledsoe St San Fernando Calif (5)
Javex Electronics P O Box 646 Redlands Calif (6)
Jerroid Electronics Corp Jerroid Bldg 15th & Lehigh Ave Philadelphia 32 Pa (1-5-6)
Kin Tel Div Cohu Electronics Inc 5725 Kearney Villa Rd San Diego 12 Calif (5)
Kirkland (H R) Co 8 King St Morristown NJ (1-2)
Lake Mfg Co 2323 Chestnut St Oakland Calif (3-6)
Loge Electronics Inc 2171 W Washington Blvd Los Angeles 18 Calif (1-3-4)
Lovsted (C M) & Co Inc 4000 W Marginal Way Seattle 6 Wash (1)
Minneapolis-Honeywell Regulator Co 2753 Fourth Ave S Minneapolis 8 Minn (3)
Motorola Communications & Electronics Inc 4501 W Augusta Blvd Chicago 51 Ill (1-8)
Murdock Corp 158 Carter St Chelsea 50 Mass (3)
Newcomb Audio Products Co 6824 Lexington Ave Hollywood 38 Calif (1-4)
Nutone Inc Madison & Red Bank Roads Cincinnati 27 Ohio (3)
O'Brien Electric Corp 6514 Santa Monica Blvd Hollywood 38 Calif (1-3-4)
Partrick & Wilkins Co 51 N Seventh St Phila 6 Pa (1-2)
Progress Mfg Co Inc Castor Ave & Tulip St Phila 34 Pa (3)
Radio Corp of America Industrial Electronic Products Front & Cooper Sts Camden 2 NJ (1-3-4-5-6-7-8)
Railroad Accessories Corp Tenakill Park Cresskill NJ (10)
Rauland-Borg Corp 3535 West Addison St Chicago 18 Ill (1-3-4)
Rheem Califone Corp 1020 N La Brea Ave Hollywood 38 Calif (4)
Rittenhouse Co Inc 68 East St Honeoye Falls NY (3)
Roche (Paul C) Co Inc 11 Park Pl New York 7 NY (3-7)
Simpson (Mark) Mfg Co Inc 32-28 49th St Long Island City 3 NY (1-3-4)
Sperti Faraday Inc 1322 E Church St Adrian Mich (1-2)
Standard Electric Time Co 89 Logan St Springfield 2 Mass (1-2)

Talk-A-Phone Co 5013 N Kedzie Ave Chicago 25 Ill (3)
Tele-Jac Co 2200 Tyler Ave El Monte Calif (6)
Trade-Wind Div Robbins & Myers Inc 7755 Paramount Pl Pico Rivera Calif (3)
Webster Electric Co 1900 Clark St Racine Wis (3-4-7)
Wheeler Electronic Corp 150 E Aurora St Waterbury 20 Conn (3-7)
Wheelock Signals Inc Branchport Ave Long Branch NJ (1)
Wilmot Castle Co Box 629 Rochester 2 NY (5)

10G. SOUNDING DEVICES

1. **Bells**
2. **Buzzers**
3. **Gongs**
4. **Horns**
5. **Whistles**
6. **Chimes**
7. **Sirens**

Acme Fire Alarm Company Inc 106 Seventh Ave New York 11 NY (3-6)
Auth Electric Co Inc 34-20 45th St LIC 1 NY (1-2-3-4-6-7)
●AUTOCALL CO 58 Warden Ave Shelby Ohio (1-3-4-6-8)—ADV PG 110
Cable Electric Products Inc 234 Daboll St Providence 7 RI (1-2-6)
Couch (S H) Co Inc Arlington St North Quincy 71 Mass (1-2-3-4)
Eagle Electric Mfg Co Inc 23-10 Bridge Plaza South Long Island City 1 NY (1-2)
Edwards Co Inc Norwalk Conn (1-2-4-6-7)
Ellenco Inc 3322 M St N W Washington 7 DC (1 through 7)
Faraday Inc 2011 W Beecher Rd Adrian Mich (1)
●FEDERAL SIGN & SIGNAL CORP 13626 S Western Ave Blue Island Ill (1-2-3-4-6-7)—ADV PG 118
Gem Electric Mfg Co Inc 237 37th St Brooklyn NY (1-2)
Hose-McCann Telephone Co Inc 25th St & 3rd Ave Brooklyn 32 NY (1-2-3)
International Business Machines Corp Times Equipment Div 590 Madison Ave New York 22 NY (1-2-3-4-6-7)
●INTERNATIONAL REGISTER CO 2620 W Washington Blvd Chicago 12 Ill (6)—ADV PG 99
Lake Mfg Co 2323 Chestnut St Oakland Calif (1-2)
Lee Electric Inc 566 52nd St West New York NJ (1-2-3-6)
Liberty Bell Mfg Co Swainsboro Ga (1-2-3-6)
Line Electric Co 229 River St Orange NJ (2)
Lumenite Electronic Corp 407 S Dearborn St Chicago 5 Ill (1-2-4-7)
Marvin Electric Mfg Co 648 Santa Fe Ave Los Angeles 21 Calif (6)
Murdock Corp 158 Carter St Chelsea 50 Mass (2)
National Time & Signal Corp 21800 Wyoming Ave Detroit 37 Mich (1-2-3-4-6)
Nutone Inc Madison & Red Bank Roads Cincinnati 27 Ohio (6)
Partrick & Wilkins Co 51 N Seventh St Phila 6 Pa (1-2-3-4-6-7)
Reeve Electrical Co Inc 120 W 42nd St New York 36 NY (1-2-3)
Rittenhouse Co Inc 68 East St Honeoye Falls NY (1-2-6)
Rodale Mfg Co Inc 6th & Minor Sts Emmaus Pa (1-2)
Sireno Signal Mfg Co 65 Passaic Ave Kearny NJ (7)
Spies Electric Works 564 W Van Buren St Chicago 7 Ill (1)
Standard Electric Time Co 89 Logan St Springfield 2 Mass (1-2-3-4-6)
Sterling Siren Fire Alarm Co Inc 12 Bartlett St Rochester 8 NY (7)
Suttle Equipment Co 135 S LaSalle St Chicago 3 Ill (1-2)
Trine Mfg Corp 1430 Ferris Place New York 61 NY (1-2)
Victor Ventilator Div Philip Carey Mfg Co Middletown Ohio (1-2-6)
Viking Instruments Inc East Haddam Conn (1-2-3-4-7)
Wheelock Signals Inc Branchport Ave Long Branch NJ (1 thru 6)

TECHNICAL LITERATURE

To obtain the following literature, enter the appropriate Code Numbers* on the Free Information cards elsewhere in this issue.

*Code No.	Description, Pages Catalog No. & Mfr.
10-1	Methods and Instruments for Maintenance of Generators, Motors and Power Equipment; 35p; Cat. No. D-62 (Associated Research)
10-2	Audible Signal Equipment; 16p; Cat. Sec. K (Benjamin)
10-3	Fire Alarm Systems; 25p; Cat. No. 131A (Couch)
10-4	Hosptial Signaling Systems; 17p; Cat. No. 137 (Couch)
10-5	High Precision Potentiometers; 27p (DeJur)
10-6	Panel Instruments; 23p (DeJur)
10-7	Communication Systems; 15p; Cat. No. 6000 (Mark Simpson)
10-8	Nurses Calling System; 18p (Wheelock)
10-9	Recording and Indicating Instruments; 72p (West)

SECTION 11. HEATING & COOLING EQUIPMENT

11A. ELECTRIC SPACE HEATERS

1. **Wall panels & units**
2. **Ceiling panels & units**
3. **Ceiling & floor cables**
4. **Baseboard units**
5. **Floor furnaces & heaters**
6. **Duct heaters**
7. **Steam radiators**
8. **Unit heaters, forced air**
9. **Central furnaces**
10. **Portables**
11. **Heated floor mats**
12. **Heater & lighting fixture combined**
13. **Cabinet convectors, heaters & ventilators**
14. **Bathroom heaters**
15. **Infrared spot heaters**
16. **Explosion-proof heaters**
17. **Drive-in theater car heaters**
18. **Crane cab heaters**

For space heating of buildings. Industrial and commercial heating equipment is listed under "Electric Process Heating." See also "Heat Pumps."

Acme Electric Heating Corp 99 Reading St Boston 19 Mass (1-4-7-10)
Adam (Frank) Electric Co 3647 Windsor Pl St Louis Mo (1)
Aeroil Products Co Inc 69 Wesley St South Hackensack NJ (8)
Allied Precision Industries 425 Stevens St (P O Box 149) Geneva Ill (1-10)
American Tool & Engineering 2105 Moore St San Diego Calif (4)
Ampere Industries 60 Boston St Newark 3 NJ (2-4-10)
Anchor Mfg Co P O Box 959 Manchester NH (4)
Arvin Industries Inc Columbus Ind (2-3-4-10)
●BERKO ELECTRIC MFG CORP 182-20 Liberty Ave Jamaica 12 NY (1-2-4-8-10-14-15)—ADV PG 110
Berns Air King Corp 3050 N Rockwell St Chicago Ill (1)
Broan Mfg Co Inc Hartford Wis (8-12)
Brown Products Corp 1090 Springfield Rd Union NJ (4)
Can Arm Corp P O Box 156 Champlain NY (1-4-10)
Carrier Corp Carrier Parkway Syracuse 1 NY (8)
Cavalier Corp Electric Heating Div 343 W First St Chattanooga Tenn (1-3-4-10-14)
Ceilheat Inc 5212 Homberg Drive (P O Box 10066) Knoxville Tenn (1-3-4-5-8-10)
Circle Air Industries Inc 244 Herkimer St Brooklyn 16 NY (1-4-8-10)
Continental Radiant Glass Heating Corp 4 W 40 St New York 18 NY (1-4-10)
Diamond Wire & Cable Co 445 Park Ave Sycamore Ill (3)
Dixie Raydiant Electric Heat Corp 66 Eleventh St N E Atlanta 9 Ga (1-2-3-10)
Easy-Heat Inc 555 N Michigan St Lakeville Ind (3)
Electrend Products Corp State & Water Sts St Joseph Mich (1-8)
Electric Steam Radiator Corp 1 Electric Ave Paris Ky (7)
Electro-Ray Mfg Co 8310 N E Highway 99 Vancover Wash (4)
Electromode Div Commercial Controls Corp P O Box 1052 Rochester 3 NY (1-3-4-8-10-13-14-15-16-17-18)
Electrovector Inc 475 Flushing Ave Brooklyn 5 NY (1-4)
Emerson Electric Mfg Co 8100 Florissant Ave St Louis 36 Mo (1-3-4-10-12-14)
Emerson-Pryne Co Towne Ave at Monterey (P O Box 698) Pomona Calif (2)
Essex Wire Corp Wire & Cable Div 2601 S Adams Marion Ind (3)
Everwarm Inc 3600 Pleasant Ridge Rd Knoxville Tenn (1-3-10)
Gar Wood Industries Inc Wayne Mich (1-2)
General Alliance Corp 2105 Moore St San Diego Calif (4)
General Electric Co Apparatus Sales Schenectady 5 NY (8-10)
General Electric Co Wiring Devices Dept 95 Hathaway St Providence R I (3-4-8)
●GENERAL ELECTRIC SUPPLY CO 1260 Boston Ave Bridgeport Conn (1-2-3-4-8-10-12)—ADV PG 84-85
Glenn Electric Heater Corp 374 Jeliff Ave Newark NJ (8)
Guyan Machinery Co Inc Box 150 Logan W Va (1-10)
Hanovia Lamp Div Engelhard Industries Inc 100 Chestnut St Newark 5 NJ (2)
Heatmore Inc 651 Driggs Ave Brooklyn 11 NY (1-2-4-10)
Hotpoint Co 5600 W Taylor St Chicago 44 Ill (4)
Hunter Div Robbins & Myers Inc 2500 Frisco Ave Memphis 14 Tenn (1-4-10)
Ilg Electric Ventilating Co 2850 N Pulaski Rd Chicago 41 Ill (8)
Industrial Engineering & Equipment Co Inc 24 Hanley Industrial Ct St Louis 17 Mo (6)
International Oil Burner Co 3800 Park Ave St Louis 10 Mo (4-9)
Interstate Rubber Products Corp 908 Avila St Los Angeles 12 Calif (11)
Kilbury Mfg Co Inc 14529 Hawthorne Blvd Lawndale Calif (8-9)
Knapp-Monarch Co Bent & Potomac St Louis 16 Mo (10)
Kord Mfg Co Inc 4510 White Plains Rd New York 70 NY (10)
Kritzer Products Div Peerless of America 5800 N Pulaski Rd Chicago 46 Ill (9)
Larco Inc Route 20 East Painesville Ohio (18)
Markel Electric Products Inc 145 Seneca St Buffalo 3 NY (1-2-4-8-10)
Martin Stamping & Stove Co Electric Heater Div P O Box 259 Huntsville Ala (1-3-4-5-10)
Matthews Electric Heater Mfg Co Albertville Ala (1-5-10)
McGraw-Edison Co Albion Div 704 Clark St N Albion Mich (4)
Meier Electric and Machine Co Inc 3525 E Washington St Indianapolis 7 Ind (1-3-10)
Mission Appliance Corp Hyde Park Station Los Angeles 43 Calif (1-2)
MO-DE-CO Div Modern Development Co Box 196 Encino Calif (1-2-10-12)
Modernheat Cable Corp P O Box 754 Kingsport Tenn (1-3-4-10)
Mueller Climatrol Div Worthington Corp 2005 W Oklahoma Ave Milwaukee 1 Wis (9)
Nutone Inc Madison & Red Bank Roads Cincinnati 27 Ohio (2-8)
Quartz Products Corp 688 Somerset St (P O Box 628) Plainfield NJ (8)
Ramco Mfg & Engineering 5413 N E Columbia Blvd Portland Ore (4-9)

Roberson Inc 1539 E 103 St Seattle 55 Wash (1-3-4-8)
Sair Corp 9802 Euclid Ave Cleveland 6 Ohio (3-4-10)
Seaboard Products Corp Electric Heating Div 191 Frelinghuysen Ave Newark NJ (4-10)
Siebring Mfg Co George Iowa (9)
Spartan Electric Radiator Corp 52-55 74th St Maspeth 78 NY (1-4-7-10)
Sun-Heat Inc 998 E Woodbridge Detroit 7 Mich (1-10)
Sun-Tron Corp 7435 W Wilson Ave Chicago 31 Ill (1-2-4)
Sunwarm Inc 1601 Jared Dr (P O Box 266) Kingsport Tenn (1-3-4-10)
Swan Mfg Co 1801 W 26 St Vancouver Wash (1-4)
Tennessee Plastics Inc Box 3117 Carroll Reece Branch Johnson City Tenn (1 thru 6-10)
Thermador Electrical Mfg Co 5119 District Blvd Los Angeles 22 Calif (1-4-8-10)
Thermal-Aire of America Inc 10 State Street (Room 905) Boston Mass (1-2-4)
Trade-Wind Div Robbins & Myers Inc 7755 Paramount Pa Pico Rivera Calif (1)
Victor Ventilator Div Philip Carey Mfg Co Middletown Ohio (8)
Vulcan Radiator Co 775 Capitol Ave Hartford 6 Conn (4)
Wesix Electric Heater Co 390 First St San Francisco 5 Calif (1 thru 6-8-10)
Westchester Brickote Products Co Inc 1528 Williamsbridge Rd NY 61 NY (7)
Westinghouse Electric Corp P O Box 2278 Pittsburgh 30 Pa (1-4-5-6-8-9-10)
●WESTINGHOUSE ELECTRIC SUPPLY CO 3 Gateway Center (Box 448) Pittsburgh 30 Pa (1-4-8-10)—ADV PG 2nd cover
Wiegand (Edwin L) Co 7637 Thomas Blvd Pittsburgh 8 Pa (1-3-4-5-6-8-10-13-14-15)
Wing (L J) Mfg Co 303 N Stiles St Linden NJ (8)
York Div Borg-Warner Corp Gantley Rd York Pa (6)
Zell-Aire Corp Orton Ave Reading Pa (1-3-4-8)

11B. HEAT PUMPS

Central, packaged, or custom dual-function units for space heating and cooling of buildings.

Acme Industries Inc 620 N Mechanic St Jackson Mich
American Coils Co Route 524-Lakewood Rd Farmingdale NJ
Carrier Corp Carrier Parkway Syracuse 1 NY
Fedders Corp 58-01 Grand Ave Maspeth NY
Forston Co 2117-2119 Judiway (P O Box 10231) Houston 18 Tex
General Electric Co Air Conditioning Div Weathertron Dept 5 Lawrence St Bloomfield NJ
General Electric Co Air Conditioning Dept Central Air Conditioner Troup Highway Tyler Tex
General Electric Co Major Appliance Div Room Air Conditioner Dept Appliance Park Louisville 1 Ky
McGraw-Edison Co Albion Div 704 Clark St N Albion Mich
Mueller Climatrol Div Worthington Corp 2005 W Oklahoma Ave Milwaukee 1 Wis
Perfection Industries Div Hupp Corp 1135 Ivanhoe Rd Cleveland 10 Ohio
Typhoon Air Conditioning Div Hupp Corp 505 Carroll St Brooklyn 15 NY
Westinghouse Electric Corp P O Box 2278 Pittsburgh 30 Pa
York Div Borg-Warner Corp Grantley Rd York Pa

11C. ELECTRIC PROCESS HEATING EQUIPMENT

1. **Electric ovens**
2. **Electric furnaces**
3. **Electric steam boilers**
4. **Dielectric heaters**
5. **Induction heaters**
6. **Infrared heaters**
7. **Heating elements**
8. **Soil, pipe, & snow-melting cable or tape**
9. **Wire preheaters**
10. **Immersion heaters**
11. **Swimming pool heaters**
12. **Industrial hotplates**
13. **Snow-melting mats**
14. **Engine heaters**

Electrical equipment used to provide heat for commercial or industrial processes.

Acme Electric Heating Corp 99 Reading St Boston 19 Mass (1-7-12)
Acra Electric Corp 9901 Pacific Ave Franklin Park Ill (7)
Ajax Electric Co 854 Frankford Ave Philadelphia 23 Pa (2)
Ajax Magnethermic Corp 3990 Simon Rd Youngstown 1 Ohio (1-2-5)
Allis-Chalmers Mfg Co 930 S 70th St Milwaukee 1 Wis (1-4-5)
Bellevue Industrial Furnace Co 2620 Crane Ave Detroit 14 Mich (1-2)
Berko Electric Mfg Corp 182-20 Liberty Ave Jamaica 12 NY (8)
Blue M Electric Co 138th & Chatham Sts Blue Island Ill (1-2)
Can Arm Corp P O Box 156 Champlain NY (6-7)
Ceilheat Inc 5212 Homberg Drive (P O Box 10066) Knoxville Tenn (8)
Coates Electric Mfg Co 3419-11th Ave S W Seattle 4 Wash (1-2-3)
Com-Pak-Ett Mfg Corp 650 Grand St Allegan Mich (10)
Corning Glass Works Corning NY (6-7)
Corona Mfg Corp 11300 Tuxford St Sun Valley Calif (1-6-7)
Cox and Co Inc 115 E 23 St New York 10 NY (8)
Cutler-Hammer Inc 228 N 12 St Milwaukee 1 Wis (4-5-7)
Dalton Electric Heating Co 11 Goodhue St Salem Mass (7)
Despatch Oven Co 619 S E 8th St Minneapolis 14 Minn (1-2-7)
Detroit Electric Furnace Div Kuhlman Electric Co 11400 State Fair Ave Detroit Mich (2)
Doyle (J E) Co 1220 W 6th St Cleveland 13 Ohio (6)
Dry Clime Lamp Corp Greensburg Ind (1-7)
Eagle Electric Mfg Co Inc 23-10 Bridge Plaza South Long Island City 1 NY (7)
Easy-Heat Inc 555 N Michigan St Lakeville Ind (8-13)
Electric Arc Inc 152 Jelliff Ave Newark 8 NJ (1-2-5)
Electric Hotpack Co Inc Cottman Ave at Melrose St Phila 35 Pa (1-2)
Electromode Div Commercial Controls Corp P O Box 1052 Rochester 3 NY (8-13)
Everwarm Inc 3600 Pleasant Ridge Rd Knoxville Tenn (7)
Falcon Equipment Co 13th St (Box E-255) New Brighton Pa (1-2-7)
Fostoria Corp N Main St Fostoria Ohio (1-6)
Fox Products Co 4720 N 18 St Phila 41 Pa (7)
Gem Electro Mfg Co Inc 237 37th St Brooklyn NY (7)
General Electric Co Apparatus Sales Schenectady 5 NY (5-7)
Globar Plant (Refractories Div) Carborundum Co Niagara Falls NY (7)
Grieve-Hendry Co Inc 1350 N Elston Ave Chicago 22 Ill (1-2)
Hanovia Lamp Div Engelhard Industries Inc 100 Chestnnut St Newark 5 NJ (6)
Harper Electric Furnace Corp 39 River St Buffalo 2 NY (2)
Hayes (C I) Inc 800 Wellington Ave Cranston 10 R I (1-2-5)
Hevi Duty Electric Co 3002 W Burleigh St (P O Box 563) Milwaukee 1 Wis (1-2-7)
Huppert (K H) Co 68 30 S Cottage Grove Ave Chicago 37 Ill (1-27)
Induction Heating Corp 181 Wythe Ave Brooklyn 11 NY (1-4-5)
Industrial Engineering & Equipment Co Inc 24 Hanley Industrial Ct St Louis 17 Mo (7)
Jensen Inc 9331 Freeland Ave Detroit 28 Mich (1)
Kneisley Electric Co 2501-2509 Lagrange St Toledo 3 Ohio (10)
Kord Mfg Co Inc 4510 White Plains Rd New York 70 NY (7)
LaRose (W T) & Associates Inc 31 Ontario St Cohoes NY (4)
Lindberg Engineering Co 2450 W Hubbard St Chicago 12 Ill (1-2)
Lucifer Furnaces Inc Neshaminy Pa (2)
McGraw-Edison Co Albion Div 704 Clark St N Albion Mich (7)
Michigan Oven Co 415 Brainard Detroit 1 Mich (1)
Midget Heater & Specialty Co 2801 Pacific Ave Tacoma 4 Wash (7)
Miskella Infra-Red Co E 73rd & Grand Ave Cleveland 4 Ohio (1-6)
Modernheat Cable Corp P O Box 754 Kingsport Tenn (8)
Nelson Electric Mfg Co P O Box 5385 Tulsa Okla (8)
North American Electric Lamo Co 1520 North 13th St St Louis 6 Mo (1-6)
Pereny Equipment Co Inc Tri-Village Sta Columbus 12 Ohio (1-2)
Phillips Mfg Co Inc 8200 Grand Ave Minneapolis 20 Minn (7)
Potter & Rayfield Inc P O Box 1042 Atlanta Ga (1)
Pyrosil Inc 1889 Front St Cuyahoga Falls Ohio (1-6-7)
Reeve Electronics Inc 609 W Lake St Chicago 6 Ill (4-5)
Roberson Inc 1539 E 103 St Seattle 55 Wash (8)
Robotron Corp 21300 W Eight Mile Rd Detroit 19 Mich (5)
Safeway Heat Elements Inc Middlefield St (P O Box 1109) Middletown Conn (7)
Scientific Electric Inc 105-109 Monroe St Garfield NJ (4-5)
Sherman Industrial Electronics Div of Engineering Design Inc 108 N Gill St State College Pa (1-4-5)
Siebring Mfg Co George Iowa (3-7)
Smith-Gates Corp Farmington Conn (8)
Southeast Lighting Inc 521 E 20 St Charlotte 1 NC (6)
Sta-Warm Electric Co 53 N Chestnut St Ravenna Ohio (2)
Star-A Electric Mfg Co Inc 269 Meserole St Brooklyn 6 NY (7)
Steiner-Ives Co Springfield Rd Union NJ (1)
Sunwarm Inc 1601 Jared Dr (P O Box 266) Kingsport Tenn (8)
Tec Imports 14525 Bessemer St Van Nuys Calif (6)
Thermal-Aire of America Inc 10 State Street (Room 905) Boston Mass (6)
Thermal American Fused Quartz Co 18 Salem St Dover NJ (10)
Thermolyne Corp 513 Huff St Dubuque Iowa (2-12)
Tocco Div Ohio Crankshaft Co 3800 Harvard Ave Cleveland 5 Ohio (5)
Trent Inc 201-299 Leverington Ave Phila 27 Pa (1-2-7)
Triangle Equipment Co Inc 45 River Rd Nutley 10 NJ (1-6)
Trindl Products Ltd 1807-11 S Clark St Chicago 16 Ill (7)
Trippe Mfg Co 133 N Jefferson St Chicago 6 Ill (6)
Tuttle & Kift Inc 1823 N Monitor St Chicago 39 Ill (7)
Ulanet (George) Co 413-15 Market St Newark 5 NJ (7)
Velotron Inc 1186 Broadway New York 1 NY (1-6)
Vulcan Electric Co 88 Holten St Danvers Mass (7)
Waage Electric Inc 720 Colfax Ave Kenilworth NJ (7-10)
Walco Electric Co 131 Blackstone St Providence 1 RI (9)
Watlow Electric Mfg Co 1376 Ferguson Ave St Louis 14 Mo (7)
Wesix Electric Heater Co 390 First St San Francisco 5 Calif (6-7-8)
Westinghouse Electric Corp P O Box 2278 Pittsburgh 30 Pa (5-6)
Whitaker (Douglas C) Co Inc 141 E Glenside Ave Glenside Pa (6)
Wiegand (Edwin L) Co 7637 Thomas Blvd Pittsburgh 8 Pa (3-6-7-11-13-14)
Wil-Son Mfg Co Cloverport Ky (1-6)
Young Bros Co 1831 Columbus Rd Cleveland 13 Ohio (1-4)

11E. AIR CONDITIONERS

1. **Industrial & commercial**
2. **Residential, central unit**
3. **Residential, room console**
4. **Wall, built in**
5. **Window**
6. **Portable**

Equipment using refrigerating-cycle principle to cool air.

Acme Industries Inc 620 N Mechanic St Jackson Mich (1-2)
Air & Refrigeration Corp 439 Madison Ave New York NY (1)
Airtemp Div Chrysler Corp 1600 Webster St Dayton 1 Ohio (1-2-4-5)
American Coils Co Route 524-Lakewood Rd Farmingdale NJ (1-2)
American-Standard Industrial Div Detroit 32 Mich (1)
Carrier Corp Carrier Parkway Syracuse 1 NY (1-2-3-4-5-6)
Circle Air Industries Inc 244 Herkimer St Brooklyn 16 NY (1-2-4)
Clarage Fan Co Kalamazoo Mich (1)
Cool-ette Inc 20080 James Couzens Highway Detroit 35 Mich (1-2-4)
Curtis Mfg Co Refrigeration Div 1905 Kienlen Ave St Louis 20 Mo (1-2)
Emerson Electric Mfg Co 8100 Florissant Ave St Louis 36 Mo (5)
Fedders Corp 58-01 Grand Ave Maspeth NY (2-4-5)
Forston Co 2117-2119 Judiway (P O Box 10231) Houston 18 Tex (1-2-5)
Frick Co Waynesboro Pa (1)
Frigidaire Div General Motors Corp 300 Taylor St Dayton 1 Ohio (4-5)
General Electric Co Air Conditioning Div Commercial & Industrial Air Conditioning Dept 5 Lawrence St Bloomfield NJ (1)
General Electric Co Air Conditioning Dept Central Air Conditioner Troup Highway Tyler Tex (1-2)
General Electric Co Major Appliance Div Room Air Conditioner Dept Appliance Park Louisville 1 Ky (4-5)
Gibson Refrigerator Co 515-615 W Williams St Greenville Mich (1-2-4-5)
●GRAYBAR ELECTRIC CO INC 420 Lexington Ave NY 17 NY (1-2-3-5)—ADV PG 2
Great Northern Mfg Corp 1056 N Wood St Chicago 22 Ill (2)

Hastings Air Conditioning Co Inc 108 S Colorado Ave Hastings Neb (1-2)
Hoyt Mfg Corp Forge Rd Westport Mass (1)
Ilg Electric Ventilating Co 2850 N Pulaski Rd Chicago 41 Ill (1)
International Oil Burner Co 3800 Park Ave St Louis 10 Mo (2)
Kauffman Air Conditioning Co 4336 W Pine Blvd St Louis Mo (1-2-3-4-5)
King Refrigerator Corp 76-02 Woodhaven Blvd Glendale 27 NY (4)
Larco Inc Route 20 East Painesville Ohio (1)
McGraw-Edison Co Albion Div 704 Clark St N Albion Mich (2-5-6)
Mueller Climatrol Div Worthington Corp 2005 W Oklahoma Ave Milwaukee 1 Wis (1-2)
Perfection Industries Div Hupp Corp 1135 Ivanhoe Rd Cleveland 10 Ohio (2)
Quiet-Heat Mfg Corp 46 Oliver St Newark 5 NJ (1-2-4-5)
Ready-Power Co 11231 Freud Ave Detroit 14 Mich (1-2)
Remington Corp Remington Air Conditioning Div Willey St Auburn NY (1-3-4-5)
Trane Co 2nd & Cameron Ave La Crosse Wis (1-2-4)
Typhoon Air Conditioning Div Hupp Corp 505 Carroll St Brooklyn 15 NY (1-2)
United States Air Conditioning Corp P O Box 360 Delaware Ohio (1-2)
Welbilt Corp 57-18 Flushing Ave Maspeth 78 LI NY (5)
Westinghouse Electric Corp P O Box 2278 Pittsburgh 30 Pa (1 thru 6)
Whirlpool Corp Benton Harbor Mich (4-5)
Worthington Corp Worthington Ave Harrison NJ (1)
York Div Borg-Warner Corp Grantley Rd York Pa (1-2-3-4-5)

11F. AIR HANDLING EQUIPMENT

1. **Blowers**
2. **Circulating fans**
3. **Exhaust fans, industrial & commercial**
4. **Exhaust fans, residential**
5. **Portable fans**
6. **Residential fans & lighting fixtures combined**
7. **Range hoods**
8. **Induced draft fans**

Equipment used for ventilation, exhaust, or circulation of air. See also "Air Conditioners."

Aerovent Fan Co Inc Ash and Block Sts Piqua Ohio (1-2-3-5)
Air Controls Inc 2310 Superior Ave Cleveland 14 Ohio (2-3-4-5)
Air-Marine Motors Inc 369 Bay View Ave Amityville NY (1)
Airfan Engineering Co 7401 Telegraph Rd Los Angeles 22 Calif (1-3)
Allen Cooler & Ventilator Inc 704 Woodward St Rochester Mich (1-2-3-4)
Alliance Mfg Co Inc Lake Park Blvd Alliance Ohio (5)
Allis-Chalmers Mfg Co 930 S 70th St Milwaukee 1 Wis (1)
American Coolair Corp 3604 Mayflower St (P O Box 2300) Jacksonville 3 Fla (2-3-4)
American-Standard Industrial Div Detroit 32 Mich (1-3-4)
Ammerman Co Inc P O Box 182 Stillwater Minn (1-2-3-5)
Arex Co 612 N Michigan Ave Chicago 11 Ill (2-3)
Argo Products Co 3500 Goodfellow St Louis 20 Mo (2-3-4-5)
Atlas Mineral Products Co Mertztown Pa (4)
Atlas Tool and Mfg Co 5147 Natural Bridge Ave St Louis 15 Mo (4-5)
Baldor Electric Co 4353 Duncan Ave St Louis 10 Mo (2-3-4-5)
Bar-Brook Mfg Co Inc 6133-35 Linwood Ave Shreveport La (2-3-4)
Berns Air King Corp 3050 N Rockwell St Chicago Ill (3-4-7)
Bertram (Harvey P) Co 2225 Bogen St Cincinnati Ohio (1-2-3-5)
Broan Mfg Co Inc Hartford Wis (3-4-6-7)
Buffalo Forge Co 490 Broadway Buffalo 5 NY (1-2-3-4)
Burt Mfg Co 936 S High St Akron 11 Ohio (3-4)
Century Fan & Ventilator Co 45 Cedar St Stamford Conn (1-3)
Chelsea Fan and Blower Co 639 South Ave Plainfield NJ (1-2-3-4-5)
Chicago Blower Corp 9867 Pacific Ave Franklin Park Ill (1-2-3)
Circle Air Industries Inc 244 Herkimer St Brooklyn 16 NY (1)
Clarage Fan Co Kalamazoo Mich (1-2-3)
Commercialaire Corp of America 840 E 98 St Brooklyn 36 NY (1 thru 5)
Coppus Engineering Corp 344 Park Ave Worcester 10 Mass (1-5)
Dana Fan & Blower Corp 2644 Colerain Ave Cincinnati 14 Ohio (3-4)
Davidson Fan Co 213 California St Newton 58 Mass (3)
Dayton Electric Mfg Co 126 S Oakley Blvd Chicago 12 Ill (1-2-3-4-5)
DeBothezat Fans Div American Machine & Metals Inc East Moline Ill (2-3-5)
DeVilbiss Co 300 Phillips Ave Toledo 1 Ohio (3)
Diehl Mfg Co 1187 Finderne Ave Somerville NJ (2-3-4)
Dominion Electric Corp 150 Elm St Mansfield Ohio (3-4-5)
Elliott Co Jeannette Pa (1)
Emerson Electric Mfg Co 8100 Florissant Ave St Louis 36 Mo (2-4-5)
Emerson-Pryne Co Towne Ave at Monterey (P O Box 698) Pomona Calif (1-3-4)
Folsom Co Inc 3104 Oak Lane Dallas 26 Tex (2-3-4-5)
Fort Worth Steel & Machinery Co 3600 McCart Street P O Box 1038 Fort Worth 1 Texas (3)
Fresh'nd-Aire Div Cory Corp 221 N LaSalle St Chicago Ill (5)
Frigid Inc 1250 Rockaway Ave Brooklyn 36 NY (1 thru 5)
Garden City Fan & Blower Co 801 N Eighth St Niles Mich (1-2-3)
General Blower Co 8610 Ferris Ave Morton Grove Ill (1-2)
●GENERAL ELECTRIC SUPPLY CO 1260 Boston Ave Bridgeport Conn (1 thru 7)—ADV PG 84-85
Globe Industries Inc 1784 Stanley Ave Dayton 4 Ohio (1-2)
Graybar Electric Co Inc 420 Lexington Ave NY 17 NY (1-2-3-4-5)
Hamilton Fan & Blower Co 2644 Colerain Ave Cincinnati 14 Ohio (1-2-3-4)
Hartzell Propeller Fan Co S Englert Ave Piqua Ohio (1-2-3-5)
Heinze Electric Co 685 Lawrence St Lowell Mass (1)
Hirschman-Pohle Co Inc 300 Lent Ave Le Roy NY (3)
Hunter Div Robbins & Myers Inc 2500 Frisco Ave Memphis 14 Tenn (2-3-4-5)
Ilg Electric Ventilating Co 2850 N Pulaski Rd Chicago 41 Ill (1-2-3-4-5)
IMC Magnetics Corp 570 Main St Westbury NY (1)
Industrial Plastic Fabricators Inc Endicott St Norwood Mass (1-3)
International Oil Burner Co 3800 Park Ave St Louis 10 Mo (4)
Iona Ventilator Co Inc 2821-29 W Dauphin St Phila 32 Pa (2-3)
Jeffrey Mfg Co 832 N 4th St Columbus 16 Ohio (1-3)
Joy Mfg Co H W Oliver Bldg Pittsburgh 22 Pa (1-2-3)
Kisco Co Inc 2414 DeKalb St St Louis 4 Mo (5)
Kord Mfg Co Inc 4510 White Plains Rd New York 70 NY (4-5)
Lau Blower Co 2001 Home Ave Dayton 7 Ohio (1 thru 5-7)
Leigh Building Products Coopersville Mich (3)
Lehigh Fan & Blower Div Fuller Co Catasauqua Pa (3-8)
Markel Electric Products Inc 145 Seneca St Buffalo 3 NY (5)
Martin Fan & Blower Co 4634 W 21st Pl Chicago 50 Ill (1-2-3-4-5)
Marvin Electric Mfg Co 648 Santa Fe Ave Los Angeles 21 Calif (4)
McLarty Systems 2600 Dickman Rd Battle Creek Mich (3-5-8)
McLean Engineering Laboratories 70 Washington Rd (P O Box 228) Princeton NJ (2-3-4)
Meier Electric and Machine Co Inc 3525 E Washington St Indianapolis 7 Ind (2-3-4)
National Engineering & Mfg Co 16th & Lamine Sts Sedalia Mo (2-3-4-5)
Norky Mfg Corp P O Box 669 Covington Ky (3-4)
Northern Blower Div Buell Engineering Co 6434 Barberton Ave Cleveland 2 Ohio (3)
Nutone Inc Madison & Red Bank Roads Cincinnati 27 Ohio (4-7)
Peerless Electric Div H K Porter Co Inc 1401 W Market St Warren Ohio (1 thru 4)
Perfect-Line Mfg Corp Old Country Rd & Railroad Ave P O Box 65 Hicksville LI NY (4)
Phelps Fan Mfg Co 715 Thomas St Little Rock Ark (2-3-4)
Power Line Fan Co Plainfield NJ (3)
Progress Mfg Co Inc Castor Ave & Tulip St Phila 34 Pa (4-7)
Reed Unit Fans Inc 501 N St Patrick St New Orleans La (2-3-4-5)
Reynolds Electric Co 3000 River Rd River Grove Ill (2-5)
Rich (Phil) Fan Mfg Co Inc 2900 Caroline Houston 4 Texas (2-3-4-5)
Ripley Co Inc Factory St Middletown Conn (1)
Robbins & Myers Inc 1345 Lagonda Ave Springfield Ohio (1-2-3-4)
Roberson Inc 1539 E 103 St Seattle 55 Wash (3)
Roto-Beam 1755-57 N Keeler Ave Chicago 39 Ill (4)
Shallcross Controls Inc 2217-21 N 31 St Milwaukee 8 Wis (1)
Siebring Mfg Co George Iowa (2-3)
Signal Electric Div King-Seeley Corp 1800 13th St Menominee Mich (2-3-4)
Simpson Co 1470 Doolittle Dr San Leandro Calif (4)
Skil Corp 5033 Elston Ave Chicago 30 Ill (1)
Stanat Mfg Co Inc 524 Shames Dr Westbury NY (1)
Standard Electric Mfg Co Inc Haddon Ave West Berlin NJ (2-3-4)
Sterling Blower Co 791 Windsor St Hartford Conn (1-3)
Stewart Industries Inc 320 E St Joseph St Indianapolis 2 Ind (4)
Trade-Wind Div Robbins & Meyers Inc 7755 Paramount Pl Pico Rivera Calif (1-3-4)
Trane Co 2nd & Cameron Ave La Crosse Wis (3)
United Blower Co Inc 193 Centre St NY 13 NY (1)
United Electric Motor Co 178 Centre St NY 13 NY (1)
United States Air Conditioning Corp P O Box 360 Delaware Ohio
Valley Fan Mfg Co Box 206 Fort Valley Ga (2-3-4-5)
Ventrola Mfg Co 501 S Chestnut St Owosso Mich (4)
Viking Air Products Div Lau Blower Co 5601 Walworth Ave Cleveland 2 Ohio (1-4)
West Wind Corp 1800 Airport Way Seattle 4 Wash (1-4-5)
Westinghouse Electric Corp P O Box 2278 Pittsburgh 30 Pa (1-2-3-5-6)
Westinghouse Electric Corp Sturtevant Div Damon St Hyde Park Boston 36 Mass (1-3)
Wing (L J) Mfg Co 303 N Stiles St Linden NJ (1-3-8)
Wind-Way Fan & Ventilator Co 531 St Joseph St New Orleans 12 La (2-3-4)

11G. AIR CONTROL EQUIPMENT

1. **Humidifiers**
2. **Dehumidifiers**
3. **Air purifiers**
4. **Air ionizers**

For control of air moisture content and characteristics.

Air & Refrigeration Corp 439 Madison Ave New York City NY (2)
Bahnson Co 1001 S Marshall St Winston-Salem NC (1)
Berns Air King Corp 3050 N Rockwell St Chicago Ill (2)
Burgess Vibrocrafters Inc Grayslake Ill (1)
Carrier Corp Carrier Parkway Syracuse 1 NY (2)
Dampp-Chaser Inc 1404 Spartanburg Hwy Hendersonville NC (2)
Dryomatic Corp 715 N Fayette St (P O Box 591) Alexandria Va (2)
Ebco Mfg Co 265 N Hamilton Rd Columbus 13 Ohio (1)
Fedders Corp 58-01 Grand Ave Maspeth NY (3)
Fresh'nd-Aire Div Cory Corp 221 N LaSalle St Chicago Ill (1-2)
Gibson Refrigerator Co 515-615 W Williams St Greenville Mich (2)
Haertel (Walter) Co 2840 4th Ave So Minneapolis Minn (1)
Kauffman Air Conditioning Co 4336 W Pine Blvd St Louis Mo (1)
McGraw-Edison Co Albion Div 704 Clark St N Albion Mich (2-3)
Mitchell Mfg Co 3200 W Peterson Ave Chicago 45 Ill (2)
Mueller Climatrol Div Worthington Corp 2005 W Oklahoma Ave Milwaukee 1 Wis (1)
Remington Corp Remington Air Conditioning Div Willey St Auburn NY (2)
Supreme Electric Products Co 194 Vassar St Rochester 7 NY (1)
Suttle Equipment Corp 135 S LaSalle St Chicago 3 Ill (1)
Viking Air Products Div Lau Blower Co 5601 Walworth Ave Cleveland 2 Ohio (1)
Walton Laboratories Inc 1186 Grove St Irvington 11 NJ (1)
Westinghouse Electric Corp P O Box 2278 Pittsburgh 30 Pa (1)
Westinghouse Electric Corp Sturtevant Div Damon St Hyde Park Boston 36 Mass (2)
Whirlpool Corp Benton Harbor Mich (2)

TECHNICAL LITERATURE

To obtain the following literature, enter the appropriate Code Numbers* on the Free Information cards elsewhere in this issue.

*Code No.	Description, Pages Catalog No. & Mfr.
11-1	Refrigeration and Air Conditioning; 43p; Cat. No. R-8 (Airserco)

11-2 Heating & Ventilating Units; 49p; Cat. No. 9727 (American-Standard)

11-3 Airfoil Bladed Fans; 59p; Cat. No. A-1103 (American-Standard)

11-4 Breeze Conditioning Systems; 48p (Coolair)

11-5 Electric Ovens and Furnaces; 197p; Cat. No. 158

11-6 Roof Ventilators and Wall Louvres; 15p (Burt)

11-7 Industrial Fans; 24p; Cat. No. 600-60A (Chelsea)

11-8 Industrial Fans & Cyclone Separators; 16p; Cat. No. 500-C (Fort Worth)

11-9 Propeller Fans, Propellers and Accessories; 16p; Cat. No. CFJ-160 (Hamilton)

11-10 Industrial Electric Heat Treating Equipment; 130p (Hayes)

11-11 Air Conditioning; 19p; Cat. No. AC-573 (Larco)

11-12 Heating Elements; 34p (Heatube)

11-13 Industrial Fans; 19p (Power Line)

11-14 Blowers; 16p; Cat. No. B-101 (Ripley)

11-15 Industrial Heating Equipment; 28p (Sta-Warm)

11-16 Induction Heating Equipment; 19p; Cat. No. 22G (Ohio Crankshaft)

11-17 Electrically Heated Industrial Equipment; 68p (Trent)

11-18 Electrical Heating Units; 64p; Cat. No. 60 (Wiegand)

11-19 Electrical Heating Units and Equipment for Industry; 22p; Cat. No. CS-600 (Wiegand)

SECTION 12. TOOLS, SUPPLIES & EQUIPMENT

12A. LINEMAN'S TOOLS & ACCESSORIES

1. **Climbing equipment**
2. **Disconnect sticks**
3. **Hoists, packs, gins & winches**
4. **Pike poles and tongs**
5. **Protective clothing & equipment**
6. **Tamping, digging & trenching hand tools**
7. **Tool pouches, buckets & accessory bags**
8. **Tree trimmers & pruners**
9. **Wire-stringing equipment**
10. **Hot line tools**
11. **Ladders**
12. **Insulated jumpers**
13. **Safety grounding equipment**

Heavy mobile pole line equipment is listed under "Line Trucks & Mobile Equipment" in Section 1.

Adams Engineering Co 31711 Solon Rd Solon Ohio (3)
Bartlett Mfg Co 3003 E Grand Blvd Detroit 2 Mich (8)
Bashlin (W M) Co Bashlin Bldg Grove City Pa (1-7)
Bodendieck Tool Co P O Box 499 Taylorville Ill (2-3-4-8-10-11-12-13)
Buffalo Machine Mfg Co 586 Tonawanda St Buffalo 7 NY (9)
Chance (A B) Co 210 N Allen St Centralia Mo (2-3-4-6-7-8-10)
Charleston Rubber Co Stark Industrial Park Charleston SC (5)
Chisholm-Moore Hoist Div Columbus McKinnon Corp 6072 Fremont Ave Tonawanda NY (3)
Coffing Hoist Div Duff-Norton Co Danville Ill (3)
Cope (T J) Div Rome Cable Corp Third & Walnut Sts Collegeville 5 Pa (3)
David's Gloves Inc 21 W Pleasant St Springfield Ohio (5)
Dicke Tool Co 1201 Warren Ave Downers Grove Ill (4-6-8)
Distribution & High Line Specialties Co 2100 Del Norte St Louis 17 Mo (9)
Dorsey (John E) Co 570 E First St Boston 27 Mass (5)
●GENERAL ELECTRIC SUPPLY CO 1260 Boston Ave Bridgeport Conn (1 thru 10)—ADV PG 84-85
General Scientific Equipment Co Limekiln Pike & Williams Ave Philadelphia 50 Pa (5-7)
Goodall Rubber Co 493 Whitehead Rd Trenton NJ (5)
Handy Angle Div Lug-All Co 355 Lancaster Ave Haverford Pa (3)
Hendrix Wire & Cable Corp Milford NH (9)
Highway Trailer Co 405 E Fulton St Edgerton Wis (3)
Holan Corp 4100 W 150 St Cleveland 35 Ohio (3-6)
Hubbard & Co 6301 Butler St Pittsburgh 1 Pa (6-9)
Hunter Tools 9851 Alburtis St Santa Fe Springs Calif (7)
Joslyn Mfg & Supply Co 3700 S Morgan St Chicago 9 Ill (3-4-6-8-9)
Kearney (James R) Corp 4236 Clayton Ave St Louis 10 Mo (2-6-8)
King Mfg Corp 3146 N Chicago Ave Chicago 22 Ill (3)
Klein (Mathias) & Sons 7200 McCormick Rd Chicago 45 Ill (1-3-7-9)
Kline Savidge Co Inc 163 N Third St Phila 6 Pa (1-7)
LeTourneau (RG) Inc 2399 S MacArthur Longview Tex (3)
Line Material Industries McGraw-Edison Co 700 W Michigan St Milwaukee Wis (2-6-9)
Mall Tool Co 25000 S Western Ave Park Forest Ill (6)
McCabe-Powers Body Co 5900 N Broadway St Louis 15 Mo (3)
Miller Equipment Co Inc 13th & New Sts Franklin Pa (1-7)
Miller-Robinson Co 7007 Avalon Blvd Los Angeles 3 Calif (8)
Mine Safety Appliances Co 201 N Braddock Ave Pittsburgh 8 Pa (1-5-7)
Mitchell Industries Inc Box 17 Municipal Airport Mineral Wells Tex (1)
Proto Tool Co Box 3519 Terminal Annex Los Angeles 54 Calif (7)
Robot Industries Inc 7041 Orchard St Dearborn Mich (3)
S & C Electric Co 4435 Ravenswood Ave Chicago 40 Ill (2)
Safety Live Line Tool Co 973 86th Ave Oakland 21 Calif (2-3-4-7-9-10)
Sasgen Derrick Co 3101 Grand Ave Chicago Ill (3)
Shaw-Box Crane & Hoist Div Manning Maxwell & Moore Inc Muskegon Mich (3)
Sherman & Reilly Inc 1 Broad St Chattanooga 2 Tenn (3-9)
Silent Hoist & Crane Co 841-63rd St Brooklyn 20 NY (3)
Snyder (M L) & Son Inc 1897 E York St Phila 25 Pa (5)
Southern Electrical Equipment Co 308 West Bland at Mint St Charlotte 3 NC (2)
Surety Rubber Co North High St Carrollton Ohio (5)
Swett (A L) Iron Works 166 Glenwood Ave Median NY (6)
Templeton Kenly & Co Gardner Rd Broadview Ill (3)
Telsta Corp 2900 Spring St Redwood City Calif (9)
Utilities Safety Supply Co Inc Jefferson St at Highway 50 Lee's Summit Mo (1-5-7)
Utilities Service Co 1 Pine St Allentown Pa (4)
Watteredge Co 19629 West Lake Rd Rocky River 16 Ohio (9)
Wilson Rubber Co 1200 Garfield Ave SW Canton 6 Ohio (5)
Wiss (J) & Sons Co 33 Littleton Ave Newark 7 NJ (8)

12B. WIRE & CABLE TOOLS & EQUIPMENT

1. **Benders, cable & strand**
2. **Cutting, stripping & splicing tools**
3. **Wire gages**
4. **Pulling-in grips, guides, jacks & winches**
5. **Wire reels, lifts, stands & carts**
6. **Pressure-connector tools**
7. **Staplers**
8. **Twisters**
9. **Wire measurers**
10. **Vulcanizing equipment**
11. **Fish tape, grips, pullers, reels & leaders**
12. **Wire installation guns**

AMP Inc Eisenhower Blvd Harrisburg Pa (2-6)
Adams Engineering Co 31711 Solon Rd Solon Ohio (4-5)
Allen Iron & Steel Co P O Box 550 Norristown Pa (5-9)
Aluminum Co of America 1501 Alcoa Bldg Pittsburgh 19 Pa (6)
American Electrical Heater Co 6110 Cass Ave Detroit 2 Mich (2)
American Pulley Co 4200 Wissahickon Ave Philadelphia 29 Pa (5)
Anthony (F M) Co 773 University Ave Berkeley 10 Calif (2-6)
Appleton Electric Co 1701-59 Wellington Ave Chicago 13 Ill (11)
Ark-Les Switch Corp 51 Water St Watertown Mass (6)
Arrolet Corp Foot of Bower St Montgomery Pa (11)
Arrow Fastener Co Inc 1 Junius St Brooklyn 12 NY (7)
Artos Engineering Co 2757 S 28 St Milwaukee 46 Wis (2-9)
Barth Corp 12650 Brookpark Rd Cleveland 30 Ohio (4-11)
Bashlin (W M) Co Bashlin Bldg Grove City Pa (4)
Bay-Tronic Co 43 Evergreen St Bayonne NJ (2-8)
Bodendieck Tool Co P O Box 499 Taylorville Ill (2)
Buchanan Electrical Products Corp 434 U S Route 22 Hillside NJ (2-6)
Burbank Electrical Products 215 W Palm Ave P O Box 7 Burbank Calif (2-11)
Burndy Corp Norwalk Conn (3-6)
Cam-Lok Div Empire Products Inc 9213 Blue Ash Rd Cincinnati 42 Ohio (2-6-10)
Chicago Pneumatic Tool Co 6 E 44 St NY 17 NY (4)
Columbia Products Inc Wrightsville Pa (5-9)
Cope (T J) Div Rome Cable Corp Third & Walnut Sts Collegeville 5 Pa (1-4-11)
Crescent Tool Co 200 Harrison St Jamestown NY (4)
Davis Electric Co 28 Parker St Wallingford Conn (9)
Dicke Tool Co 1201 Warren Ave Downers Grove Ill (4-5)
Duff-Norton Co P O Box 1889 Pittsburgh 30 Pa (5)
Electro Dynamics Corp 4917 St Elmo Ave Bethesda 14 Md (2-6)
Ericson Mfg Co 5209 Euclid Ave P O Box 1401 Cleveland 3 Ohio (5)
Fullman Mfg Co 1209-1215 Jefferson St Latrobe Pa (11)
G-C Electronics Co 400 S Wyman St Rockford Ill (2)
General Hardware Mfg Co Inc 80 White St NY 13 NY (2-3)
Gleason Reel Corp 740 N Plankinton Ave Milwaukee 3 Wis (5)
●GRAYBAR ELECTRIC CO INC 420 Lexington Ave NY 17 NY (2-4-6)—ADV PG 2
Greenlee Tool Co 2136 Twelfth St Rockford Ill (4)
Heller Industrial Fastener Div Heller Roberts Mfg Corp 6115 Carnegie Ave Cleveland 1 Ohio (7)
Highway Trailer Co 405 E Fulton St Edgerton Wis (4)
Holan Corp 4100 W 150 St Cleveland 35 Ohio (4-5)
Holub Industries Inc 442 Elm St Sycamore Ill (2-11)
Hunter Tools 9851 Alburtis St Santa Fe Springs Calif (2)
Husky Products Inc 5300 Vine St Cincinnati 17 Ohio (4)
Hykon Mfg Co 163 E State St (P O Box 923 EP) Alliance Ohio (5-9)
●IDEAL INDUSTRIES INC 5136 Park Ave Sycamore Ill (2-6-11)—ADV PG 103
Interstate Drop Forge Co Special Products Div 4051 N 27 St Milwaukee 16 Wis (2)
Jerrold Electronics Corp Jerrold Bldg 15th & Lehigh Ave Philadelphia 32 Pa (2-6)
Jet Line Products Inc 615 Fugate Ave Charlotte NC (12)
Joslyn Mfg & Supply Co 3700 S Morgan St Chicago 9 Ill (6)
Joy Mfg Co Electrical Products Div 1201 Macklind Ave St Louis 10 Mo (10)

Kearney (James R) Corp 4236 Clayton Ave St Louis 10 Mo (6)
Kellems Co Inc 15 Williams St Stonington Conn (4)
King Mfg Corp 3146 N Chicago Ave Chicago 22 Ill (4)
Klein (Mathias) & Sons 7200 McCormick Rd Chicago 45 Ill (2-4-8-11)
LaRaus Mfg Co Inc LeRoy NY (5)
Lew Electric Fittings Co 627 W Lake St Chicago 6 Ill (11)
Line Material Industries McGraw-Edison Co 700 W Michigan St Milwaukee Wis (1-4)
Lint (Clyde W) 2323 W 18 St Chicago 8 Ill (5-9-11)
Madison Equipment Co 5405 Detroit Ave Cleveland 2 Ohio (11)
Martindale Electric Co 1383 Hird Ave Cleveland 7 Ohio (2)
Marvel Rack Mfg Co Inc 96 43rd Ave NE Minneapolis 21 Minn (9)
Miller Electric Mfg Co Inc 718 S Bounds St Appleton Wis (13)
Miller Equipment Co Inc 13th & New St Franklin Pa (2)
Milwaukee Parts Corp 607-15 S Sixth St Milwaukee 4 Wis (2)
Mine Safety Appliances Co 201 N Braddock Ave Pittsburgh 8 Pa (2)
Minneapolis Electric & Construction Co 80 S 12 St Minneapolis 3 Minn (9)
Olympic Instruments Inc Vashon Wash (5-9)
Potter & Rayfield Inc P O Box 1042 Atlanta Ga (2)
Rattan Mfg Co 10 Wall St (P O Box 1745) New Haven 7 Conn (11)
Richards (J R) Co P O Box 482 Carnegie Pa (11)
Roll-A-Reel Co 4630 Reading Rd Cincinnati 29 Ohio (5)
Rush Wire Stripper Div Eraser Co Inc 1068 S Clinton St Syracuse 4 NY (2-8)
Sherman (H B) Mfg Co 22 Barney Battle Creek Mich (6)
Snap-On-Tools Corp 8028 28th Ave Kenosha Wis (2)
Speedex Mfg Co 418 S Wyman St Rockford Ill (2)
Steel City Electric Co 1207 Columbus Ave Pittsburgh 33 Pa (11)
Steel Electric Products Co Inc 5602 18th Ave Brooklyn 4 NY (11)
Suttle Equipment Corp 135 S LaSalle St Chicago 3 Ill (5)
Swett (A L) Iron Works 166 Glenwood Ave Medina NY (5)
Templeton Kenly & Co Gardner Rd Broadview Ill (4)
Thomas & Betts Co 36 Butler St Elizabeth 1 NJ (2-6-11)
Thomas Instrument Co Box 41 Liverpool Rd Phoenix NY (2)
Tomic Sales & Engineering Co 20000 Sherwood Ave Detroit 34 Mich (2)
Triton Mfg Co Inc East Haddam Conn (2)
Utica Drop Forge & Tool Div Kelsey-Hayes Co Utica 4 NY (2)
Vaco Products Co 317 E Ontario St Chicago 11 Ill (6)
Waldman (John J) Co 477 Atlantic Ave Brooklyn 17 NY (9)
Whitaker Reel Mfg Co 3704 Jackson St Monroe La (5)
Wiss (J) & Sons Co 33 Littleton Ave Newark 7 NJ (2)
Woodhead (Daniel) Co 15 N Jefferson St Chicago 6 Ill (5)
Yorkville Metal Products Co 627 Greenwich St New York 14 NY (2)

12C. RACEWAY TOOLS & EQUIPMENT

1. **Benders & hickeys, conduit & EMT**
2. **Cutters & indenters, conduit & EMT**
3. **Conduit tool pickups & grapples**
4. **Knockout punches**
5. **Conduit measurers**
6. **Pipe pushers**
7. **Mandrels**
8. **Reamers**
9. **Threaders, stocks & dies**
10. **Pipe vises, stands & holders**
11. **Conduit racks**
12. **Bending gauges**
13. **Bending and pushing pumps**
14. **Power drives and takeoffs**
15. **Pipe bevelers**

Allen Iron & Steel Co P O Box 550 Norristown Pa (11)
American Pipe Bending Machine Co Inc Poultney Vt (1)
American Pipe Tool Co 4856 W Kinzie St Chicago 44 Ill (8-9-10)
Ampere Industries 60 Boston St Newark 3 NJ (6)
Appleton Electric Co 1701-59 Wellington Ave Chicago 13 Ill (1)
Armstrong Bros Tool Co 5200 W Armstrong Ave Chicago 46 Ill (9-10)
Arrolet Corp Foot of Bower St Montgomery Pa (1)
Athol Machine & Foundry Co 82 South St Athol Mass (10)
Beaver Pipe Tools Inc 310 Dana N E Warren Ohio (2-9-14)
Blackhawk Industrial Div Blackhawk Mfg Co 13320 W Reichert Pl Butler Wis (1-4)
●**BRIEGEL METHOD TOOL CO 104 N E First St Galva Ill (2-10)—ADV PG 100**
C & B Engineering and Fabricating Corp P O Box 8701 Houston Tex (1-5)
Chamor Mfg Corp 43-63 11th St Long Island City 1 NY (1)
Collins Machinery Corp 955 Monterey Pass Rd Monterey Park Calif (2-9)
Cope (T J) Div Rome Cable Corp Third & Walnut Sts Collegeville 5 Pa (3)
Erie Tool Works 12th & Liberty Sts Erie Pa (2-9-10)
Gardner Bender Co 5448 N 24 Pl Milwaukee 9 Wis (1)
Gedney Electric Co Americas Bldg Radio City NY 20 NY (1)
●**GENERAL ELECTRIC SUPPLY CO 1260 Boston Ave Bridgeport Conn (1-2-4-8-9)—ADV PG 84-85**
General Hardware Mfg Co Inc 80 White St NY 13 NY (8)
Greenlee Tool Co 2136 Twelfth St Rockford Ill (1-4-6-13-14)
Hein-Werner Corp 1200 National Ave Waukesha Wis (1)
Henderson Electric Co 25 Greenwood Ave East Orange NJ (1)
Hill (Walter P) Inc 22183 Telegraph Rd Detroit 19 Mich (1)
Holub Industries Inc 442 Elm St Sycamore Ill (8)
Hossfeld Mfg Co 460 W Third St Winona Minn (1)
Lew Electric Fittings Co 627 W Lake St Chicago 6 Ill (1)
Lidseen of North Carolina Inc 1000 First St Hayesville NC (1)
Lint (Clyde W) 2323 W 18 St Chicago 8 Ill (1-4-10)
Mercury Hydraulics Inc 1632 Wazee St Denver 2 Colo (6)
Midwest Electric Mfg Co 1639 Walnut St Chicago 12 Ill (1)
Mine Safety Appliances Co 201 N Braddock Ave Pittsburgh 8 Pa (9)
Muncie Gear Works Inc P O Box 433 Cordele Ga (9)
National Electric Div H K Porter Co Inc Porter Bldg Pittsburgh 19 Pa (1)
Nye Tool Co 4120-30 Fullerton Ave Chicago 32 Ill (4-9-10)
Oster Mfg Co 1340 E 289 St Wickliffe Ohio (8-9-10)
Proto Tool Co Box 3519 Terminal Annex Los Angeles 54 Calif (2)
Rattan Mfg Co 10 Wall St (P O Box 1745) New Haven 7 Conn (1)
Republic Steel Corp Steel And Tubes Div 224 E 131 St Cleveland 8 Ohio (1-7)
Richards (J R) Co P O Box 482 Carnegie Pa (1)
Ridge Tool Co 400 Clark St Elyria Ohio (2-8-9-10)
Salem Tool Co 767 S Ellsworth Ave Salem Ohio (6)
●**SILVEY PIPE BENDER CO 2215 Brighton Ave Kansas City 27 Mo (1)—ADV PG 126**
Spring Load Mfg Corp 6332 Maynard Ave Seattle Wash (2)
Steel City Electric Co 1207 Columbus Ave Pittsburgh 33 Pa (1)
Steel Electric Products Co Inc 5602 18th Ave Brooklyn 4 NY (1)
Steelduct Co Republic Steel Bldg Youngstown Ohio (1)
Templeton Kenly & Co Gardner Rd Broadview Ill (6)
Thepitt Mfg Co Gregg & Hammond Sts Carnegie Pa (1)
Thomas & Betts Co 36 Butler St Elizabeth 1 NJ (1)
Toledo Pipe Threading Machine Co P O Box 1678 Toledo 3 Ohio (2-8-9-10-14)
Velocity Power Tool Co 201 N Braddock Ave Pittsburgh 8 Pa (14)
Vickers Inc Tulsa Products Div 731 E First St Tulsa 20 Okla (14)
Wachs (E H) Co 1525 N Dayton St Chicago 22 Ill (2-14-15)
Wagner Malleable Products Co 222 W Adams St Chicago 6 Ill (2)
Wells Mfg Co 220 Ninth St San Francisco 3 Calif (2)
Wheeler Mfg Co Ross Rd Ashtabula Ohio (2)

12D. MATERIALS HANDLING EQUIPMENT

1. **Ladders**
2. **Scaffolds, work towers & platforms**
3. **Hoists**
4. **Lift trucks**
5. **Maintenance trucks**
6. **Hand trucks**
7. **Truck bodies & bins**
8. **Bins, cabinets, shelving & framing angle**
9. **Office & workshop trailers**
10. **Jacks & jack screws**
11. **Tool chests**
12. **Winches**

A E Industrial Div Aircraft Armaments Inc P O Box 6853 Baltimore 4 Maryland (3)
Allen Iron & Steel Co P O Box 550 Norristown Pa (6-8)
Allied Mfg & Sales Co 3101 W Grand Ave Chicago 22 Ill (1-2-3-4-5-6)
Allis-Chalmers Mfg Co 930 S 70th St Milwaukee 1 Wis (4)
American Pulley Co 4200 Wisahickon Ave Phila 29 Pa (4-5-6-9)
Automatic Transportation Co 101 W 87th St Chicago 20 Ill (4-6)
Baker-Roos Inc 602 W McCarty St Indianapolis 6 Ind (2)
Ballymore Co Lincoln & Garfield Aves West Chester Pa (1-2)
Beaver-Advance Corp 12th & Factory Sts Ellwood City Pa (2)
Bernard-Franklin Co Inc Frankford & Torresdale Aves Philadelphia 24 Pa (6-8)
Bruhn Steel Products Co 300 E Dunes Highway Chesterton Ind (11)
Building Service Co 4923 18th Ave S Minneapolis 17 Minn (2)
Case (J I) Co Racine Wis (4)
Charles Machine Works Inc P O Box 66 Perry Okla (2)
Chester Hoist Div National Screw & Mfg Co Lisbon Ohio (3)
Chisholm-Moore Hoist Div Columbus McKinnon Corp 6072 Fremont Ave Tonawanda N Y (3)
Clark (George P) Div Cragin & Wilkins Co Inc Fitchburg Mass (4-6)
Coffing Hoist Div Duff-Norton Co Danville Ill (3)
CraneVeyor Corp 1240 S Boyle Ave Los Angeles 23 Calif (3)
Dayton Safety Ladder Co 2337 Gilbert Ave Cincinnati 6 Ohio (1)
Detroit Hoist & Machine Co 8292 Morrow St Detroit 11 Mich (3)
Di-Acro Corp 427 Eighth Ave Lake City Minn (6)
Economy Engineering Co 4511 West Lake St Chicago 24 Ill (1 thru 5)
Ederer Engineering Co 2943 1st Ave S Seattle 4 Wash (3)
Eicor Div F L Jacobs Co 4235 W North Ave Chicago 39 Ill (1-2-5)
Electro Lift Inc 204 Sergeant Ave Clifton NJ (3)
Elwell-Parker Electric Co 4319 St Clair Ave Cleveland 3 Ohio (4)
Erickson Power Lift Trucks Inc St Anthony Blvd & University Ave NE Minneapolis 18 Minn (4)
F W D Corp 105 E 12 St Clintonville Wis (5)
Fairbanks Co 393 Lafayette St NY 3 NY (6)
Flex Angle Corp 3760 Oakwood Ave (P O Box 418) Youngstown 1 Ohio (8)
Frick-Gallagher Mfg Co 110 S Michigan Ave Wellston Ohio (8)
Gar Wood Industries Inc Wayne Mich (4)
Goshen Churn & Ladder Inc Goshen Ind (1-2)
Haertel (Walter) Co 2840 4th Ave So Minneapolis Minn (8)
Hamilton Caster & Mfg Co 1519 Dixie Highway Hamilton Ohio (5-6-7-9)
Handy Angle Div Lug-All Co 355 Lancaster Ave Haverford Pa (3)
Harnischfeger Corp 4400 W National Ave Milwaukee 46 Wis (3)
Holan Corp 4100 W 150 St Cleveland 35 Ohio (1-7)
Hyster Co 2902 N E Clackanas St Portland 8 Ore (4)
Ingersoll-Rand Co 11 Broadway NY 4 NY (3)
Inland Ladder Co 1914 Stanford St Alameda Calif (1)
International Trailer Co Inc 725 North Point Rd Baltimore 6 Md (9)
King Mfg Corp 3146 N Chicago Ave Chicago 22 Ill (3)
Lantz Mfg Co Inc Valparaiso Ind (3)
Leebaw Mfg Co 65 Wayne Ave Youngstown 2 Ohio (5-6)
LeTourneau (RG) Inc 2399 S MacArthur Longview Tex (3)
Lift Trucks Inc 2425 Spring Grove Ave Cincinnati 14 Ohio (4-6)
Link-Belt Co Prudential Plaza Chicago 1 Ill (3-4-5-6-8-9)
Lint (Clyde W) 2323 W 18 St Chicago 8 Ill (1)
Manning Maxwell & Moore Inc 250 E Main St Stratford Conn (3)
Massey-Ferguson Industrial Div Massey-Ferguson Inc 1009 S West St Wichita 13N Kans (4)
McCabe-Powers Body Co 5900 N Broadway St Louis 15 Mo (1-3-5-7)
Mercury Mfg Co 4700 W Division St Chicago Ill (4-6)
Moto-Truc Co 1953 E 59 St Cleveland 3 Ohio (4)
Nutting Truck and Caster Co 1201 W Division St Faribault Minn (6)
Orangeville Mfg Co Orangeville Pa (6)
Patent Scaffolding Co Inc 38-21 12th St LIC 1 NY (1-2)
Penco Div Alan Wood Steel Co 200 Brower Ave Oaks Pa (8)
Proto Tool Co Box 3519 Terminal Annex Los Angeles 54 Calif (11)
Pucel Enterprises Inc 3746 Kelley Ave Cleveland 14 Ohio (6-8)
Reading Crane & Hoist Corp 2100 Adams St Reading Pa (3)
Revolvator Co 2000 86th St North Bergen NJ (4)
Robbins & Myers Inc 1345 Lagonda Ave Springfield Ohio (3)
Roi-Away Truck Mfg Co Inc 6143 S E Foster Rd Portland 6 Ore (5)

Round (David) & Son Inc Box 9557 Cleveland 39 Ohio (3-12)
Safway Steel Products Inc 6228 W State St Milwaukee 13 Wis (2)
Sasgen Derrick Co 3101 Grand Ave Chicago Ill (3)
Scranton Aluminum Mfg Co 419 S Wyoming Ave Scranton Pa (1)
Self-Lifting Piano Truck Co 423 N Main St Findlay Ohio (3-6)
Shaw-Box Crane & Hoist Div Manning Maxwell & Moore Inc Muskegon Mich (3)
Shure Mfg Corp 1601 S Hanley Rd St Louis Mo (8)
Silent Hoist & Crane Co 841-63rd St Brooklyn 20 NY (3-4)
South River Metal Products Co Inc 377 Turnpike South River NJ (1)
Stevens Appliance Truck Co Norton Rd (P O Box 897) Augusta Ga (6)
Swett (A L) Iron Works 166 Glenwood Ave Medina NY (10)
Telsta Corp 2900 Spring St Redwood City Calif (2)
Templeton Kenly & Co Gardner Rd Broadview Ill (10)
Up-Right Inc Up-Right Scaffolds Div 1013 Pardee St Berkeley 10 Calif (1-2-3)
Utility Body Co 1530 Wood St Oakland 7 Calif (7)
Vickers Inc Tulsa Products Div 731 E First St Tulsa 20 Okla (12)
Waco Mfg Co 5250 W 130 St Cleveland 30 Ohio (2)
Wellington Machine Co 133 De Wolf St Wellington Ohio (1)
Werner Co (R B) Inc P O Box 580 Greenville Pa (1-2)
Wright Hoist Div American Chain & Cable Co Inc Franklin & Hay Sts York Pa (3)
Yale & Towne Mfg Co 11000 Roosevelt Blvd Philadelphia 15 Pa (3-4-5-6)
Yeats Appliance Dolly Sales Co 2124 N 12th St Milwaukee 5 Wis (6)

12E. ARMATURE & STATOR TOOLS & EQUIPMENT

1. **Air gap gauges**
2. **Dynamic balancers**
3. **Static balancers**
4. **Holders & stands**
5. **Banders**
6. **Brush seaters**
7. **Commutator grinding, cutting, scraping & filing equipment**
8. **Wedge levelers**
9. **Bushing reamers**
10. **Brush tension scales**

Allen Electric and Equipment Co 2101-2117 N Pitcher St Kalamazoo Mich (7)
Annis (R B) Co 1101 N Delaware St Indianapolis 2 Ind (2)
Associated American Winding Machines Inc 750 St Ann's Ave New York 56 NY (5)
Co-operative Utilities Co Inc 4637-39 Mulberry St Phila 24 Pa (6-7)
DeWalt Inc Fountain Ave Lancaster Pa (7)
Foredom Electric Co Inc Bethel Conn (7)
General Electric Co Apparatus Sales Schenectady 5 N Y (2)
Gisholt Machine Co 1245 E Washington Ave Madison 10 Wis (2)
Heller Tool Co Heller Drive Newcomerstown Ohio (7)
Holub Industries Inc 442 Elm St Sycamore Ill (6-7)
Hullhorst Tools Inc 227 Wamba Ave (P O Box 3344) Toledo 7 Ohio (7)
●IDEAL INDUSTRIES INC 5136 Park Ave Sycamore Ill (6-7)—ADV PG 103
Martindale Electric Co 1383 Hird Ave Cleveland 7 Ohio (1-6-7-8-9-10)
Micro Balancing Inc 191 Herricks Rd Garden City Pk NY (2)
Potter & Rayfield Inc P O Box 1042 Atlanta Ga (4-5)
Raydyne Corp 2715 S Fourth St (P O Box 1147) Springfield Ill (2)
Simonds Saw and Steel Co 470 Main St Fitchburg Mass (7)
Sittler Corp 18 N Ada St Chicago 7 Ill (6-7)
Snap-On-Tools Corp 8028 28th Ave Kenosha Wis (7)
Vibrascope Co P O Box 97 Glenford NY (2)
Waveland Electric Co 5542 N Ashland Ave Chicago 40 Ill (6-7)
Westinghouse Electric Corp P O Box 2278 Pittsburgh 30 Pa (2)

12F. COIL TOOLS & EQUIPMENT

1. **Cheeks**
2. **Heads**
3. **Impregnators**
4. **Lacing hooks**
5. **Spreaders**
6. **Tampers**
7. **Winders & tapers**
8. **Forms**
9. **Bobbins**

Armature Coil Equipment Inc 2605 Vega Ave Cleveland 13 Ohio (5-7-8)
Associated American Winding Machines Inc 750 St Ann's Ave New York 56 NY (7)
Chapman (P E) Electrical Works Inc 1820 Choouteau Ave St Louis 3 Mo (7)
Columbia Products Inc Wrightsville Pa (7)
Continental Electric Co 1234 S Prairie Ave (P O Box 895) Hawthorne Calif (2)
Crown Industrial Products Co 713 Amsterdam St Woodstock Ill (6-7)
Dage Television Div Thompson Products Inc Michigan City Ind (5)
Davis Electric Co 28 Parker St Wallingford Conn (7)
Electro Devices Inc 580 Main St Wilmington Mass (7)
Emerson Plastics Corp 1383 Seabury Ave Bronx 61 NY (8-9)
Harder (Donald C) Co 2580 K St San Diego 2 Calif (7)
Leesona Corp P O Box 1605 Providence 1 RI (7)
Martindale Electric Co 1383 Hird Ave Cleveland 7 Ohio (1-6-7)
Maryland Lava Co Box 127 Bel Air Md (8)
Potter & Rayfield Inc P O Box 1042 Atlanta Ga (2-3-7-8)
Stokes (F J) Corp 5500 Tabor Rd Philadelphia 20 Pa (3)
Waldman (John J) Co 477 Atlantic Ave Brooklyn 17 NY (7)
Waveland Electric Co 5542 N Ashland Ave Chicago 40 Ill (1)

12G. INSULATION TOOLS

1. **Cutters**
2. **Edgers, folders, formers & turners**
3. **Wedge drivers & removers**

Crown Industrial Products Co 713 Amsterdam St Woodstock Ill (2)
Klein (Mathias) & Sons 7200 McCormick Rd Chicago 45 Ill (1)
Martindale Electric Co 1383 Hird Ave Cleveland 7 Ohio (1-2-3)
Proto Tool Co Box 3519 Terminal Annex Los Angeles 54 Calif (1)
Safety Live Line Tool Co 973 86th Ave Oakland 21 Calif (1)

12H. SOLDERING TOOLS & EQUIPMENT

1. **Guns, irons, pencils & machines**
2. **Stands & holders**
3. **Heaters**
4. **Pots**
5. **Torches**
6. **Resistance-type soldering equipment**

American Electrical Heater Co 6110 Cass Ave Detroit 2 Mich (1-6)
Bernz (Otto) Co Inc 740 Driving Park Ave Rochester 13 NY (5)
Chapman (P E) Electrical Works Inc 1820 Choteau Ave St Louis 3 Mo (1)
Clements Mfg Co 6650 S Narragansett Ave Chicago 38 Ill (5)
Cummins Portable Tool Div John Oster Mfg Co 5055 N Lydell Ave Milwaukee 17 Wis (1)
Dockson Corp 3839 Wabash Ave Detroit 8 Mich (5)
Electric Materials Co Box 390 North East Pa (1)
Electric Soldering Iron Co Inc West Elm St Deep River Conn (1-4)
General Electric Co Apparatus Sales Schenectady 5 NY (1-4)
Good-All Electric Mfg Co 112 W First St Ogallala Neb (1)
Ideal Industries Inc 5136 Park Ave Sycamore Ill (1)
Insto-Gas Corp 998 E Woodbridge St Detroit 7 Mich (1-3-5)
Kwikheat Mfg Co 3732 San Fernando Rd Glendale 4 Calif (1-2)
Lenk Mfg Co Franklin Ky (1-5)
Lint (Clyde W) 2323 W 18 St Chicago 8 Ill (4)
Luma Electric Equipment Co 1607 Coining Drive (P O Box 132) Toledo Ohio (1)
Lyon Rural Electric Co 2075 Moore St San Diego 12 Calif (4)
Mine Safety Appliances Co 201 N Braddock Ave Pittsburgh 8 Pa (5)
Mitchell Industries Inc Box 17 Municipal Airport Mineral Wells Tex (1)
National Specialties Co Inc 1902 Howell St Fort Wayne 7 Ind (1)
Prepo Corp Edgerton Wis (5)
Roche (Paul C) Co Inc 11 Park Pl New York 7 NY (1)
Smith Welding Equipment Corp 2633 4th St S E Minneapolis 14 Minn (5)

Snap-On-Tools Corp 8028 28th Ave Kenosha Wis (1)
Sta-Warm Electric Co 53 N Chestnut St Ravenna Ohio (4)
Triton Mfg Co Inc East Haddam Conn (1)
Turner Brass Works 821 Park Ave Sycamore Ill (4-5)
Ungar Electric Tools Div of Eldon Industries Inc 1475 E El Segundo Blvd Hawthorne Calif (1)
Vulcan Electric Co 88 Holten St Danvers Mass (1-2-3-4)
Waage Electric Inc 720 Colfax Ave Kenilworth NJ (4)
Wall (P) Mfg Co P O Box 71 Grove City Pa (1-2-3)
Weller Electric Corp 601 Stone's Crossing Rd Easton Pa (1)
Wen Products Inc 5808 Northwest Highway Chicago 31 Ill (1)
Wilder Mfg Co Inc Mechanic St & Erie Railroad Port Jervis NY (2)

12J. MISCELLANEOUS SHOP MACHINERY & EQUIPMENT

1. **Arbor presses**
2. **Metal benders**
3. **Metallizers**
4. **Demagnetizers**
5. **Plating equipment**
6. **Etchers & engravers**
7. **Sprayers**
8. **Gear & bearing installers & extractors**
9. **Melting pots, tanks & kettles**
10. **Electric welders & accessories**
11. **Vacuum cleaners & portable blowers**
12. **Lamp disposal units**
13. **Magnetizers**
14. **Nameplate stamping machines**

Acme Electric Heating Corp 99 Reading St Boston 19 Mass (9)
Acro Welder Mfg Co 1719 W St Paul Ave Milwaukee 3 Wis (10)
Acromark Co 320 Morrell St Elizabeth 4 NJ (4-6)
Aeroil Products Co Inc 69 Wesley St South Hackensack NJ (9)
American Floor Machine Co 518 S St Clair St Toledo 3 Ohio (11)
American Pipe Tool Co 4856 W Kinzie St Chicago 44 Ill (9)
American Vacuum Co 8100 N Ridgeway Skokie Ill (11)
Anderson (Albert & J M) Mfg Co 289 A St Boston 10 Mass (2)
Annis (R B) Co 1101 N Delaware St Indianapolis 2 Ind (4-6-13)
Armstrong-Bray & Co 5366 Northwest Highway Chicago 30 Ill (8)
Auto Arc-Weld Mfg Co 9615 Meech Ave Cleveland 5 Ohio (10)
Birdsell Products 350 N Halstead Pasadena Calif (10)
Black & Decker Mfg Co Towson 4 Md (9-11)
Blackhawk Industrial Div Blackhawk Mfg Co 13320 W Reichert Pl Butler Wis (8)
Breuer Electric Mfg Co 5100 N Ravenswood Ave Chicago 40 Ill (11)
Burgess Vibrocrafters Inc Grayslake Ill (6)
Chadsey Corp P O Box 1858 Hartford 1 Conn (12)
Clements Mfg Co 6650 S Narragansett Ave Chicago 38 Ill (11)
Cool-Amp Co 8603 W 17 Ave Portland 19 Ore (5)
Cooper (D C) Co 1467 S Michigan Ave Chicago 5 Ill (9)
Cope (T J) Div Rome Cable Corp Third & Walnut Sts Collegeville 5 Pa (9)
Coppus Engineering Corp 344 Park Ave Worcester 10 Mass (11)
Crozier Machine Tool Co 684 N Prairie Ave Hawthorne Calif (8)
Dake Corp 724 Robbins Rd Grand Haven Mich (1)
DeVilbiss Co 300 Phillips Ave Toledo 1 Ohio (7)
Di-Acro Corp 427 Eighth Ave Lake City Minn (2)
Dickey-Grabler Co 10302 Madison Ave Cleveland 2 Ohio (6)
Doyle Vacuum Cleaner Co 234 Stevens St S W Grand Rapids Mich (11)
Easco Products Inc P O Box 587 Ypsilanti Mich (4-6-13)
Eisler Engineering Co Inc 750 E 13 St Newark 3 NJ (10)
Electric Arc Inc 152 Jeliff Ave Newark 8 NJ (10)
Electro Engineering Products Co Inc 609 W Lake St Chicago 6 Ill (7)
Electro-Graphic Graver Co P O Box 265 Toledo 1 Ohio (6)
Erie Tool Works 12th & Liberty Sts Erie Pa (9)
Ewald Instruments Box 124P Kent Conn (10)
Federal Machine & Welder Co 1745 Overland Ave N E Warren Ohio (10)
General Electric Co Apparatus Sales Schenectady 5 NY (9)

General Floorcraft Inc 3630 Rombouts Ave Bronx 66 NY (11)
Graham Mfg Corp 152 Second Ave Needham Hts 94 Mass (10)
Guyan Machinery Co Inc Box 150 Logan W Va (10)
Harnischfeger Corp 4400 W National Ave Milwaukee 46 Wis (10)
Hesse Products Co 3800 N Virginia St Reno Nev (5)
Hobart Bros Hobart Square Troy 1 Ohio (10)
Holub Industries Inc 442 Elm St Sycamore Ill (11)
Hossfeld Mfg Co 460 W Third St Winona Minn (2)
●IDEAL INDUSTRIES INC 5136 Park Ave Sycamore Ill (4-6-11)—ADV PG 103
Insto-Gas Corp 998 E Woodbridge St Detroit 7 Mich (9)
Invincible Vacuum Cleaner Mfg Co Dover Ohio (11)
Kent Co Inc 359 Canal St Rome NY (11)
Klein (Leo) Electronics 2404 S LaBrea Ave Los Angeles 16 Calif (4-13)
Laduby Co Inc Boston Post Rd (P O Box 88) Branford Conn (12)
Lenco Inc 350 W Adams St Jackson Mo (10)
Lincoln Electric Co 22801 St Clair Ave Cleveland 17 Ohio (10)
Luma Electric Equipment Co 1607 Coining Drive (P O Box 132) Toledo Ohio (4-6)
Martindale Electric Co 1383 Hird Ave Cleveland 7 Ohio (1-4-6-8-11)
Mico Instrument Co 80 Trowbridge St Cambridge 38 Mass (6)
Mid-States Welder Mfg Co 6025 S Ashland Ave Chicago 36 Ill (10)
Miller Electric Mfg Co Inc 718 S Bounds St Appleton Wis (10)
Morrow Co 400 W Madison St Chicago 6 Ill (11)
National Electric Welding Machines Co 1846-1916 N Trumbull St Bay City Mich (10)
National Super Service Co 1946 N 13 St Toledo Ohio (11)
New England Carbide Tool Co Inc 55 Commercial St Medford 55 Mass (2)
Newage Industries Inc 222 York Rd Jenkintown 41 Pa (6)
Owatonna Tool Co 178 N Cedar St Owatonna Minn (1-8)
Pedrick Tool & Machine Co 3640 N Lawrence St Phila 40 Pa (2)
Peer Inc 1220 Milton St Benton Harbor Mich (10)
Pines Engineering Co Inc 601 Walnut St Aurora Ill (2)
Potter & Rayfield Inc P O Box 1042 Atlanta Ga (2)
Precision Welder Mfg Co 2483 Greenleaf Ave Elk Grove Village Ill (10)
Pullman Vacuum Cleaner Corp 25 Buick St Boston 15 Mass (11)
Radio Frequency Laboratories Inc Boonton NJ (4-13)
Ramset Fastening System Winchester-Western Div Olin Mathieson Chemical Corp 289 Winchester Ave New Haven 4 Conn (30)
●RAPID ELECTROPLATING PROCESS INC 1414 S Wabash Ave Chicago 5 Ill (5)—ADV PG 129
Rawlplug Co Inc 212 Petersville Rd New Rochelle NY (5)
Raytheon Mfg Co Commercial Apparatus & Systems Div 100 River St Waltham 54 Mass (10)
Rex Welder Co 1200 Milton St Benton Harbor Mich (10)
Sciaky Bros Inc 4915 W 67 St Chicago 38 Ill (10)
Scientific Electric Inc 105-109 Monroe St Garfield NJ (10)
Shrader (F W) Co 11623 S Broadway Los Angeles 61 Calif (4-13)
Snap-On-Tools Corp 8028 28th Ave Kenosha Wis (1-8)
Spencer Turbine Co 486 New Park Ave Hartford 6 Conn (11)
Sta-Warm Electric Co 53 N Chestnut St Ravenna Ohio (9)
Stokes (F J) Corp 5500 Tabor Rd Philadelphia 20 Pa (3)
Swett (A L) Iron Works 166 Glenwood Ave Medina NY (9)
Taylor-Winfield Corp 1052 Mahoning Ave N W Warren Ohio (10)
Trent Inc 201-299 Leverington Ave Phila 27 Pa (9)
Trindl Products Ltd 1807-11 S Clark St Chicago 16 Ill (10)
Truco Masonry Drilling Div Wheel Trueing Tool Co 3200-3220 W Davison Ave Detroit 38 Mich (11)
Turner Brass Works 821 Park Ave Sycamore Ill (9)
Universal Electric Sales Corp 3537 Lee Rd Cleveland 20 Ohio (10)
Versabar Corp 14 Whyte St Jersey City NJ (10)
Vickers Inc Electric Products Div 1847 Locust St St Louis 3 Mo (10)
Vulcan Electric Co 88 Holten St Danvers Mass (9)
Waage Electric Inc 720 Colfax Ave Kenilworth NJ (9)
Waico Electric Co 131 Blackston St Providence 1 RI (8)
Weldiuction Corp 19400 W Eight Mile Rd P O Box 146 Southfield Mich (10)
Westinghouse Electric Corp P O Box 2278 Pittsburgh 30 Pa (10-11)

12K. FASTENING DEVICES

1. **Bolt-sealing & screw-anchoring compound**
2. **Expansion bolts, shields & anchors**
3. **Concrete inserts**
4. **Toggle bolts**
5. **Powder-actuated fastening tools**
6. **Hammer-actuated fastening tools**
7. **Equipment seals and sealing devices**
8. **Threaded inserts**

APM Corp 41 Honeck St Englewood NJ (7)
Ackerman-Johnson Co 625 W Jackson Blvd Chicago 6 Ill (2-3-4)
American Sealants Co 705 N Mountain Rd Hartford 11 Conn (1)
Apex Bolt Products Co 452-458 N Claremont Ave Chicago 12 Ill (2-4)
●ARRO EXPANSION BOLT CO P O Box 388 Marion Ohio (2-4)—ADV PG 90
Bergen Laboratories Inc 60 Spruce St Paterson 1 NJ (8)
●BLACKHAWK INDUSTRIES 250 S MAIN ST Dubuque Iowa (2)—ADV PG 88
Bulldog Div Gregory Industries Inc Toledo Ave & East 28 St Lorain Ohio (2-4)
Chicago Expansion Bolt Co 1338 W Concord Pl Chicago 22 Ill (2-3-4-5)
Cleveland Trencher Co 20100 St Clair Ave Cleveland 17 Ohio (3)
Cope (T J) Div Rome Cable Corp Third & Walnut Sts Collegeville 5 Pa (3)
●DIAMOND EXPANSION BOLT CO INC Garwood NJ (2-4)—ADV PG 124
Equipment Corp of America 1537 Superior Ave Cleveland 14 Ohio (2-5)
Fastway Fasteners Inc 1676 E 28 St Lorain Ohio (2-6)
Gateway Engineering Co 3233 W Grand Ave Chicago 51 Ill (3)
Hilti Inc 73 Southfield Ave Stamford Conn (5-6)
Holub Industries Inc 442 Elm St Sycamore Ill (2-3-4)
Hubbard & Co 6301 Butler St Pittsburgh 1 Pa (2)
International Seal & Knot Protector Co 58-02 37th Ave Woodside 77 NY (6)
Jordan Industries Inc 3030 N W 75 St Miami 47 Fla (2-3-4)
Kirel Inc CPO Box 387 Kingston NY (2-3)
Leibfried (C H) Mfg Corp 95-101 Guernsey St Brooklyn 22 NY (3)
Mastercraft Plastics Co Inc 95-01 150th St Jamaica 35 NY (2)
Mine Safety Appliance Co 201 N Braddock Ave Pittsburgh 8 Pa (4-5)
Molly Corp 230 N Fifth St Reading Pa (2)
Mult-A-Frame Corp 6401 Epworth Blvd Detroit 10 Mich (3)
National Lead Co 111 Broadway NY 6 NY (2)
Omark Industries Inc 9701 S E McLoughlin Blvd Portland 22 Ore (5-6)
●PAINE CO 6 Westgate Rd Addison Ill (2-4)—ADV PG 94
●PHILLIPS DRILL CO U S 12 Michigan City Ind (2)—ADV PG 131
Ramset Fastening System Winchester-Western Div Olin Mathieson Chemical Corp 289 Winchester Ave New Haven 4 Conn (4-5)
Rawlplug Co Inc 212 Petersville Rd New Rochelle NY (2-4)
Remington Arms Co Inc 939 Barnum Ave Bridgeport 2 Conn (5)
Security Insert Co 1300 Arch St Phila 7 Pa (3)
Southco Div South Chester Corp Lester Pa (2)
Star Expansion Mountainville NY (2-3-4)
●STEEL CITY ELECTRIC CO 1207 Columbus Ave Pittsburgh 33 Pa (3)—ADV PG 104
U S Expansion Bolt Co State St & PRR York Pa (2-4-6)
Velocity Power Tool Co 201 N Braddock Ave Pittsburgh 8 Pa (5)
Wahlund (M Paul) Mechanical Laboratory P O Box 16 Grant Iowa (3)

12L. MISCELLANEOUS ELECTRICIANS' TOOLS

1. **Hammers, pliers, screwdrivers, scissors, etc.**
2. **Tool pouches & holders**
3. **Fuse pullers**
4. **Lamp changers, incandescent**
5. **Lamp changers, fluorescent**
6. **Test leads & clips**
7. **Contact burnishers**
8. **Wrenches, torque & impact**

Adre Co 8980 W Hawthorne Lane Hales Corners 3 Wis (7)
Aircraft Specialties Inc 415 Howard St Lapeer Mich (1)
Benjamin Div Thomas Industries Inc 207 E Broadway Louisville 2 Ky (4)
Billings & Spencer Co 1 Laurel St Hartford 1 Conn (1)
Black & Decker Mfg Co Towson 4 Md (8)
Blackhawk Industries 250 S Main St Dubuque Iowa (1)
Bodendieck Tool Co P O Box 499 Taylorville Ill (3)
Bonney Forge & Tool Works 2400 Rockhill Rd (North) Alliance Ohio (1)
Bridgeport Hardware Mfg Corp Schofield Ave Bridgeport 5 Conn (1)
Capewell Mfg Co 60-70 Governor St Hartford 2 Conn (1)
Chadsey Corp P O Box 1858 Hartford 1 Conn (4-5)
Champion DeArment Tool Co South Main St Meadville Pa (1)
Chance (A B) Co 210 North Allen St Centralia Mo (3)
Chicago Pneumatic Tool Co 6 E 44 St NY 17 NY (8)
Commercial Enclosed Fuse Co of NJ 6812 Polk St Guttenberg NJ (3)
Crescent Tool Co 200 Harrison St Jamestown NY (1)
Dante Electric Mfg Co Bantam Conn (3)
Diamond Tool and Horseshoe Co 4702 Grand Ave Duluth 7 Minn (1)
Dreier Brothers Inc 7301 Woodlawn Ave Chicago 19 Ill (1)
Duro Metal Products Co Kildare & Schubert Sts Chicago Ill (1)
Eagle Electric Mfg Co Inc 23-10 Bridge Plaza South Long Island City 1 NY (3)
Eastern Specialty Co 3617 N 8th St Phila 40 Pa (6)
Electro Dynamics Corp 4917 St Elmo Ave Bethesda 14 Md (1)
Erie Tool Works 12th & Liberty Sts Erie Pa (1)
Forsberg Mfg Co 125 Seaview Ave Bridgeport 1 Conn (1)
General Hardware Mfg Co Inc 80 White St NY 13 NY (1)
General Scientific Equipment Co Limekiln Pike & Williams Ave Philadelphia 50 Pa (2)
Greenlee Tool Co 2136 Twelfth St Rockford Ill (1)
Heller Tool Co Heller Drive Newcomerstown Ohio (1)
Holub Industries Inc 442 Elm St Sycamore Ill (3)
Hunter Tools 9851 Alburtis St Santa Fe Springs Calif (1-2)
Ideal Industries Inc 5136 Park Ave Sycamore Ill (3)
Industrial Devices Inc Edgewater 19 NJ (6)
Irwin Auger Bit Co 92 Grant St Wilmington Ohio (1)
Kearney (James R) Corp 4236 Clayton Ave St Louis 10 Mo (3)
Kedman Co 233 S Fifth West St Salt Lake City Utah (1)
Kett Tool Co 5055 Madison Rd Cincinnati 27 Ohio (1)
●KLEIN (MATHIAS) & SONS 7200 McCormick Rd Chicago 45 Ill (1-2)—ADV PG 106
Kraeuter & Co Inc 585 18th Ave Newark 3 NJ (1)
Lint (Clyde W) 2323 W 18 St Chicago 8 Ill (1)
Martindale Electric Co 1383 Hird Ave Cleveland 7 Ohio (1-3-6)
McGill Mfg Co Inc Valparaiso Ind (4)
Mephisto Tool Co Inc Box 16 Hudson NY (1)
Meteor Mfg Corp Emporium Pa (1)
Miller Equipment Co Inc 13th & New Streets Franklin Pa (1-2)
Millers Falls Co 57 Wells St Greenfield Mass (1)
Milwaukee Electric Tool Corp 5368 W State St Milwaukee 8 Wis (1)
Mueller Electric Co 1555G E 31 St Cleveland 14 Ohio (6)
Oxwall Tool Co Ltd 928 Broadway New York 10 NY (1)
P & C Tool Co Box 5926 Milwaukie P O Portland 22 Ore (1)
Pattern Products Co P O Box 135 Union NJ (5)
Producers and Distributors Inc 1321 Hanover Ave Allentown Pa (1)
Proto Tool Co Box 3519 Terminal Annex Los Angeles 54 Calif (1-2)
Rich (Phil) Fan Mfg Co Inc 2900 Caroline Houston 4 Tex (4-5)
Rite-O-Lite Co 308 E Washington Blvd Los Angeles Calif (4)
Rodale Mfg Co Inc 6th & Minor Sts Emmaus Pa (4)
Seeger-Williams Inc 4 Norman St Bridgeport 5 Conn (3)
Shallcross Controls Inc 2217-21 N 31 St Milwaukee 8 Wis (1)
Simpson Electric Co 5200 W Kinzie St Chicago 44 Ill (6)
Sittler Corp 18 N Ada St Chicago 7 Ill (6)
Skil Corp 5033 Elston Ave Chicago 30 Ill (1)
Slaughter Co College & Young Sts Piqua 5 Ohio (6)
Tec Imports 15001-03 Califa St Van Nuys Calif (2-4)
Thor Power Tool Co 175 N State St Aurora Ill (8)
Tilden Tool Mfg Co 209 Los Molinos San Clemente Calif (3)
Truco Masonry Drilling Div Wheel Trueing Tool Co 3200-3220 W Davison Ave Detroit 38 Mich (1-2-3)
Union Equipment Sales Corp 1539 Superior Ave Cleveland 14 Ohio (3)
United States Electrical Tool Co 3640 Llewellyn St Cincinnati Ohio (1)
Trico Fuse Mfg Co 2948 N 5th St Milwaukee 12 Wis (3-6)
Utica Drop Forge & Tool Div Kelsey-Hayes Co Utica 4 NY (1)
Vaco Products Co 317 E Ontario St Chicago 11 Ill (1)

Wallace & Tiernan Inc 25 Main St Belleville NJ (4)
Waveland Electric Co 5542 N Ashland Ave Chicago 40 Ill (7)
Wilde Tool Co Inc Hiawatha Kans (1)
Williams (J H) & Co 400 Vulcan St Buffalo 7 NY (1)
Xcelite Inc Thorne Ave at Bank St Orchard Park NY (1)

12M. CUTTING & DRILLING TOOLS

1. **Portable electric drills & saws**
2. **Hand drilling & boring tools**
3. **Masonry drills**
4. **Circle cutters**
5. **Hole saws**
6. **Metal cutters & shears**
7. **Star drills**
8. **Plaster groovers & cutters**
9. **Hammers, power driven**

Albertson & Co Inc 2999 Floyd Blvd Sioux City Iowa (1-2)
Arco Mfg Co 1701 13th Ave North (Box 817) Grand Forks ND (1)
●ARRO EXPANSION BOLT CO P O Box 388 Marion Ohio (2)—ADV PG 90
Beverly Shear Mfg Co 3023 W 111 St Chicago 43 Ill (6)
Billings & Spencer Co 1 Laurel St Hartford 1 Conn (6)
Black & Decker Mfg Co Towson 4 Md (1-5-6-9)
Capewell Mfg Co 60-70 Governor St Hartford 2 Conn (4)
Chicago Expansion Bolt Co 1338 W Concord Pl Chicago 22 Ill (3-7)
Chicago Pneumatic Tool Co 6 E 44 St NY 17 NY (1-3-7-9)
Clipper Mfg Co 2800 Warwick Kansas City 8 Mo (1-2-3-5)
Cummins Portable Tool Div John Oster Mfg Co 5055 N Lydell Ave Milwaukee 17 Wis (1)
DeWalt Inc Fountain Ave Lancaster Pa (1-6)
Di-Acro Corp 427 Eighth Ave Lake City Minn (6)
Diamond Expansion Bolt Co Inc Garwood NJ (2)
Easco Products Inc P O Box 587 Ypsilanti Mich (6)
Electric Materials Co Box 390 North East Pa (7)
Electro Engineering Products Co Inc 609 W Lake St Chicago 6 Ill (1)
Equipment Corp of America 1537 Superior Ave Cleveland 14 Ohio (2-3)
Erwood Inc 1770 Berteau Ave Chicago 13 Ill (4)
Gaston Power Tools 999 Ridge Rd Thornton Ill (1)
General Hardware Mfg Co Inc 80 White St New York 13 NY (2-4)
Greenlee Tool Co 2136 Twelfth St Rockford Ill (2)
Haft & Sons Inc 950 Kent Ave Brooklyn 5 NY (3)
Hayden Twist Drill Co Manila Ark (2)
Holub Industries Inc 442 Elm St Sycamore Ill (3-7)
Ingersoll-Rand Co 11 Broadway New York 4 NY (1-9)
Interstate Drop Forge Co Special Products Div 4051 N 27th St Milwaukee 16 Wis (6)
Irwin Auger Bit Co 92 Grant St Wilmington Ohio (2)
Jordan Industries Inc 3030 N W 75 St Miami 47 Fla (2-3)
Kawneer Co Niles Mich (4)
Kett Tool Co 5055 Madison Rd Cincinnati 27 Ohio (2)
Kraeuter & Co Inc 585 18th Ave Newark 3 NJ (7)
Lidseen of North Carolina Inc 1000 First St Hayesville NC (6)
Lint (Clyde W) 2323 W 18 St Chicago 8 Ill (6)
Mall Tool Co 25000 S Western Ave Park Forest Ill (1)
Martindale Electric Co 1383 Hird Ave Cleveland 7 Ohio (1)
Mephisto Tool Co Inc Box 16 Hudson NY (2)
Mico Instrument Co 80 Trowbridge St Cambridge 38 Mass (4)
Millers Falls Co 57 Wells St Greenfield Mass (1-5)
Milwaukee Electric Tool Corp 5368 W State St Milwaukee 8 Wis (1)
●MISENER MFG CO INC 202-208 Walton St Syracuse 2 NY (5)—ADV PG 124
Newage Industries Inc 222 York Rd Jenkintown 41 Pa (1)
Paine Co 6 Westgate Rd Addison Ill (2)
Pennsylvania Drilling Co Masonry Drill Div 1201 Banksville Rd Pittsburgh 16 Pa (2-3)
●PHILLIPS DRILL CO U S 12 Michigan City Ind (3)—ADV PG 131
Porter-Cable Machine Co 700 Marcellus St Syracuse 4 NY (1-9)
Portomag Inc 1521 E Nine Mile Detroit 20 Mich (3)
Producers and Distributors Inc 1321 Hanover Ave Allentown Pa (1)
Proto Tool Co Box 3519 Terminal Annex Los Angeles 54 Calif (3-6-7)
RCS Tool Corp 227 E Front St (P O Box 661) Bloomington Ill (1)
Rawlplug Co Inc 212 Petersville Rd New Rochelle NY (2)
Relton Corp 99 N Lotus Ave (P O Box 5546) Pasadena Calif (3)
Robertson & Ruth 460 W Lake St Elmhurst Ill (6)
Rotary Concrete Drill Co 650 S Arroyo Parkway Pasadena 1 Calif (2)
Shallcross Controls Inc 2217-21 N 31 St Milwaukee 8 Wis (1-2-4)
Skil Corp 5033 Elston Ave Chicago 30 Ill (1-2-4)
Snap-On-Tools Corp 8028 28th Ave Kenosha Wis (1-2-4-6)
Stanley Power Tools Div Stanley Works New Britain Conn (1-6)
Star Expansion Mountainville NY (2)
Starrett (L S) Co Athol Mass (4)
Super Tool Co 21650 Hoover Rd Detroit 13 Mich (2)
Telsta Corp 2900 Spring St Redwood City Calif (1)
●THOMPSON (HENRY G) & SON CO 277 Chapel St New Haven 5 Conn (5)—ADV PG 127
Thor Power Tool Co 175 N State St Aurora Ill (1-5-6-7-9)
Tilden Tool Mfg Co Inc 209 Los Molinos San Clemente Calif (3)
U S Expansion Bolt Co State St & PRR York Pa (1-2)
Wachs (E H) Co 1525 N Dayton St Chicago 22 Ill (6)
Waveland Electric Co 5542 N Ashland Ave Chicago 40 Ill (3-4-5)
Weller Electric Corp 601 Stone's Crossing Rd Easton Pa (1)
●WELLS MFG CORP 250 Service Rd Three Rivers Mich (6)—ADV PG 131
Wen Products Inc 5808 Northwest Highway Chicago 31 Ill (1)
Westinghouse Electric Corp P O Box 2278 Pittsburgh 30 Pa (1-3-4-5-7-8)
Whitman & Barnes Div United Drill and Tool Corp 40600 Plymouth Rd Plymouth Mich (2)
Wiss (J) & Sons Co 33 Littleton Ave Newark 7 NJ (6)
Wodack Electric Tool Corp 4627 W Huron St Chicago 44 Ill (1-2-8-9)
Wyzenbeek & Staff Inc 223 N California Ave Chicago 12 Ill (1-4)

12N. MACHINE ACCESSORIES

1. **Vibration & shock-isolating mounts**
2. **Static neutralizers & eliminators**
3. **Oilers**
4. **Nameplates, decals & adhesive labels**
5. **Display turntables**
6. **Motor & generator mountings & brackets**

Linemen's protective clothing & equipment is listed under "Linemen's Tools & Accessories" in Section 12.

Acme Steel Co 135th St & Perry Ave Chicago 27 Ill (6)
Acromark Co 320 Morrell St Elizabeth 4 NJ (4)
Atlantic Engravers Inc 52 Ocean Ave Amityville NY (4)
Barry Wright Corp Barry Controls Eastern Div 700 Pleasant St Watertown 72 Mass (1)
Brady (W H) Co 727 W Glendale Ave Milwaukee 9 Wis (4)
Chicago Decalcomania Co 3310 Elston Ave Chicago 18 Ill (4)
Dickey-Grabler Co 10302 Madison Ave Cleveland 2 Ohio (4)
Doyle (J E) Co 1220 W 6th St Cleveland 13 Ohio (2)
Ericson Mfg Co 1660 Hayden Ave Cleveland 12 Ohio (2)
Eynon-Dakin Co 9900 Freeland Ave Detroit 27 Mich (3)
Industrial Engravers Inc 2212 McDonald Ave Brooklyn 23 NY (4)
Labelon Corp Canandaigua NY (4)
National Decalcomania Corp 56 & Chestnut Sts Phila 39 Pa (4)
North Shore Nameplate Div Anodyne Inc 1270 N W 165 St North Miami Beach Fla (4)
Park Nameplate Co Inc 34-10 Linden Place Flushing NY (4)
Seton Name Plate Co Inc 50 Fitch St New Haven 15 Conn (4)
Spencer Industries 1508 N Mascher St Phila 22 Pa (4)
Sticht (Herman H) Co Inc 27 Park Pl New York 7 NY (2)
Topflight Corp 160 E 9th Ave York Pa (4)
United States Petroleum Co 104 Lakeview Ave Clifton NJ (3)
United States Radium Corp. Hanover Ave Morristown NJ (2-4)
Westline Products Div Western Lithograph Co 600 E Second St Los Angeles 54 Calif (4)

12P. MOTOR & GENERATOR REPLACEMENT PARTS

1. **Armatures**
2. **Bases**
3. **Bearings & bushings**
4. **Brushes**
5. **Brush holders**
6. **Capacitors, motor-starting & running**
7. **Commutators, commutator bars & rings**
8. **Fields & windings**
9. **Flexible shafts**
10. **Frames**
11. **Shims**
12. **Terminal boxes**
13. **Slip rings**

Ahlberg Bearing Co 3025 W 47 St Chicago 32 Ill (3)
Allegheny Plastics Inc Rt 51 & Thorn Run Rd Coraopolis Pa (3)
American Pulley Co 4200 Wissahickon Ave Phila 29 Pa (2)
Amplex Div Chrysler Corp P O Box 2718 Detroit 31 Mich (3-7)
Arco Mfg Co 1701 13th Ave North (Box 817) Grand Forks ND (2)
Auburn Mfg Co Pease Ave & Stack St Middletown Conn (11)
Becker Bros Carbon Co 3450 S Laramie Ave Cicero 50 Ill (4)
Benson (Alexander R) Co Inc 2 Davis Rd New Hartford N Y (6)
Boston Gear Works 14 Hayward St Quincy 71 Mass (3)
Bound Brook Bearing Corp of America Bound Brook N J (3)
Bronze Bearings Inc 340 N Ave East Cranford NJ (3)
Bunting Brass and Bronze Co 715 Spencer St Toledo 1 Ohio (3)
Carbon Engineering Corp P O Box 256 Slinger Wis (4)
Carbone Corp 400 Myrtle Ave Boonton NJ (3-4)
Chapin (Chas E) Co Inc 227 Fulton St New York 7 NY (4)
Chicago Commutator Inc Wheeling Rd & Exchange Ct Wheeling Ill (7)
Chicago Die Casting Mfg Co 2510-14 W Monroe St Chicago 12 Ill (3)
Co-operative Utilities Co Inc 4637-39 Mulberry St Phila 24 Pa (5)
Cornell-Dubilier Electric Corp 333 Hamilton Blvd South Plainfield NJ (6)
Dayton Precision Mfg Co 213 N Beckel St Dayton 3 Ohio (7)
Electric Materials Co Box 390 North East Pa (7)
Emerson Plastics Corporation 1383 Seabury Ave Bronx 61 N Y (11)
Engelhard Industries Inc 113 Astor St Newark 5 NJ (4)
Flower (D B) Mfg Co 1217 Spring Garden St Philadelphia 23 Pa (5)
Girard-Hopkins 1000 40th Ave Oakland 1 Calif (6)
Green Ball Bearing Co 9518 Cassius Ave Cleveland 5 Ohio (3)
Gwilliam Co 348 Furman St Brooklyn 1 NY (3)
Han-Kor Inc 9520 Richmond Ave Cleveland 5 Ohio (7)
Helwig Carbon Products Inc 2550 N 30 St Milwaukee 10 Wis (4)
Hyatt Bearings Div General Motors Corp Harrison NJ (3)
Illinois Condenser Co 1616 N Throop St Chicago 22 Ill (6)
Industrial Engravers Inc 2212 McDonald Ave Brooklyn 23 NY (11)
Johnson Bronze Co 500 S Mill St New Castle Pa (3)
Keystone Carbon Co Inc 1935 State St St Marys Pa (3-4)
Kirkwood Carbon Corp 4857 W 130 St Cleveland 35 Ohio (4)
Kirkwood Commutator Corp 4855 W 130 St Cleveland 35 Ohio (7-13)
Kolton Electric Mfg Co 123 New Jersey Railroad Ave Newark 5 NJ (12)
Mall Tool Co 25000 S Western Ave Park Forest Ill (9)
Marine Electric Co 195 Fremont San Francisco Calif (4)
Martindale Electric Co 1383 Hird Ave Cleveland 7 Ohio (9)
Murray Equipment Co Inc 14011 Oakland Ave Detroit 3 Mich (2)
National Electric Coil Div McGraw-Edison Co 800 King Ave Columbus 16 Ohio (8)
New Hampshire Ball Bearings Inc Route 202 Peterborough N H (3)
Ohio Carbon Co 12508 Berea Rd Cleveland 11 Ohio (4)
Overly-Hautz Co 11500 Madison Ave Cleveland 2 Ohio (2)
Pure Carbon Co Inc 441 Hall Ave St Marys Pa (4)
Pyramid Electric Co 1445 Hudson Blvd North Bergen NJ (6)
Randall Graphite Bearings Inc Greenlawn & Lake Sts Lima Ohio (3)
Ringsdorff Carbon Corp Box 22 East McKeesport Pa (4-5)
Rollway Bearing Co Inc 541 Seymour St Syracuse 4 N Y (3)
Russell & Stoll Co Inc 125 Barclay St NY 7 NY (1)
SKF Industries Inc Front St & Erie Ave Phila 32 Pa (3)
St Marys Carbon Co State St St Marys Pa (3-4)
Safe-T-Mike Corp 2904 Chapman Oakland 1 Calif (6)

Seager Standard Carbon Co 291 Church St New York 13 NY (4)
Shenango Furnace Co Centrifugally Cast Products Div West Third St Dover Ohio (3-13)
Southern Carbon Brush Co Inc 7 18th St SW (P O Box 1710) Birmingham 1 Ala (4)
Southern Electrical Equipment Co 308 W Bland at Mint St Charlotte 3 NC (13)
Sprague Electric Co North Adams Mass (6)
Stackpole Carbon Co Stackpole St St Marys Pa (3-4)
Stimple & Ward Co P O Box 1102 Pittsburgh 37 Pa (8)
Stow Mfg Co 162 Shear St Binghamton NY (9)
Superior Carbon Products Co 9115 George Ave Cleveland 5 Ohio (4-13)
Swiss Jewel Co 225 Lafayette Bldg Phila 6 Pa (3)
Toledo Commutator Co 1101 S Chestnut St Owosso Mich (7-13)
Torrington Co 59 Field St Torrington Conn (3)
United States Graphite Co 1621 Holland Ave Saginaw Mich (3-4)
Waveland Electric Co 5542 N Ashland Ave Chicago 40 Ill (4-5)
Westinghouse Electric Corp P O Box 2278 Pittsburgh 30 Pa (1 thru 13)
Wilmington Fibre Specialty Co New Castle Del (11)

2Q. SHEETS, RODS & TUBES

1. **Asbestos**
2. **Cambric**
3. **Fiber, glass fiber & fiberboard**
4. **Paper composition**
5. **Mica**
6. **Polyester film**
7. **Pressboard (Fullerboard)**
8. **Plastic**
9. **Silicone**
10. **Varnished silk**

Allegheny Plastics Inc Rt 51 & Thorn Run Rd Coraopolis Pa (8)
Anchor Packing Co 401 N Broad St Philadelphia 8 Pa (1)
Asheville-Schoonmaker Mica Co 900 Jefferson Ave Newport News Va (5)
Auburn Mfg Co Pease Ave & Stock St Middletown Conn (1 thru 9)
Bios Laboratories Inc 17 W 60 St New York 23 NY (5-6-8-9)
Brand Dielectrics 902 Main St Willimantic Conn (1-2-3-4)
Chase & Sons Inc 26 Spruce St North Quincy Mass (6-8-9)
Connecticut Hard Rubber Co 407 East St New Haven 9 Conn (9)
Continental-Diamond Fibre Newark Del (1-3-4)
Cottrell Paper Co Inc 10 Purchase St Fall River Mass (6)
Electro-Technical Products Div Sun Chemical Corp 113 E Centre St Nutley 10 NJ (1-2-3-4-6-9-10)
Emerson Plastics Corp 1383 Seabury Ave Bronx 61 NY (8)
General Electric Co Chemical & Metallurgical Div Silicone Products Dept Waterford NY (9)
General Electric Co Insulating Materials Sec Chemical Materials Dept 24 River Rd Schenectady 5 NY (2-4)
Glastic Corp 4321 Glenridge Rd Cleveland 21 Ohio (8)
Illumitronic Engineering Corp 680 E Taylor Ave Sunnyvale Calif (8)
Insulation Mfrs Corp 565 W Washington Blvd Chicago 6 Ill (4)
Johns-Manville 22 E 40 St New York 16 NY (1-3)
Keasbey & Mattison Co Butler Ave Ambler Pa (1)
Markel (L Frank) & Sons Norristown Pa (3)
Mica Fabricating Co 53 Central Ave Rochelle Park NJ (4-5)
Micacraft Products Inc 701-03 McCarter Highway Newark 5 NJ (5)
Minnesota Mining & Mfg Co Irvington Div 900 Bush Ave St Paul Minn (1-2-3-4-6-8-9-10)
Mitchell Rand Insulation Co 51 Murray St NY 7 NY (1-2-4)
Mycalex Corp of America 125 Clifton Blvd Clifton NJ (5)
National Electric Coil Div McGraw-Edison Co 800 King Ave Columbus 16 Ohio (1-2-3-4-5-6-7-8-9)
Natvar Corp 211 Randolph Ave Woodbridge NJ (2-4-8-10)
Panelyte Div St Regis Paper Co Enterprise Ave Trenton NJ (8)
Penn Fibre & Specialty Co Inc 2024 E Westmoreland St Philadelphia 34 Pa (3-4-7-8)
Permacel US Highway 1 New Brunswick NJ (1-4)
Polyken Sales Div Kendall Co 309 W Jackson Blvd Chicago 6 Ill (8)
Polymer Corp 2120 Fairmont Ave Reading Pa (8)
Raybestos-Manhattan Inc 61 Willett St Passaic NJ (1)
Red Seal Electric Co 10307 Detroit Ave Cleveland 2 Ohio (3-8)
Ruberoid Co 500 Fifth Ave New York 36 NY (1)
Silicone Insulation Inc 1383 Seabury Ave Bronx 61 NY (3-8-9)
Spaulding Fibre Co Inc 310 Wheeler St Tonawanda NY (3-4-7-8)
Standard Asbestos Mfg Co 860 W Evergreen Ave Chicago 22 Ill (1)
Stone Paper Tube Co 900 Franklin St NE Washington 17 DC (4)
Sylvania Electric Products Inc 730 Third Ave New York 19 NY (5)
Taylor Fibre Co Norristown Pa (3-8-9)
Union Carbide Corp Silicones Div 30 E 42 St New York 17 NY (9)
Westinghouse Electric Corp P O Box 2278 Pittsburgh 30 Pa (1-3-4-5-8)
Wilmington Fibre Specialty Co New Castle Del (3-4-8)

12R. TAPE—PRESSURE-SENSITIVE (ADHESIVE)

1. **Cellophane**
2. **Electrical**
3. **Friction**
4. **Masking**
5. **Rubber**
6. **Varnished cambric**
7. **Plastic**
8. **Color-coding**
9. **Corrosion-preventive**

Accurate Mfg Co 6 Hepworth Place Garfield NJ (2-3-5-7)
American Biltrite Rubber Co Boston Woven Hose & Rubber Div 29 Hampshire St Cambridge Mass (2-3-5-7)
Anchor Packing Co 401 N Broad St Philadelphia 8 Pa (2-3)
Appleton Rubber Co Inc 57 Cornwall St Boston 30 Mass (3-5-7)
Bishop Mfg Corp 10 Canfield Rd Cedar Grove NJ (2-5-7)
Brand Dielectrics 902 Main St Willimantic Conn (2)
Bright Star Industries 600 Getty Ave Clifton NJ (2-3-5-7)
Chase & Sons Inc 26 Spruce St North Quincy Mass (1-2-3-5-7)
Clifton Mfg Co Inc Mattapan Boston 26 Mass (2-3-5-7)
Connecticut Hard Rubber Co 407 East St New Haven 9 Conn (2)
Continental-Diamond Fibre Newark Del (2-7)
Dayton Industrial Products Co Melrose Park Ill (2-3-5-7)
Dunton (M W) Co 350 Kinsley Ave Providence RI (2-3)
Electro-Technical Products Div Sun Chemical Corp 113 E Centre St Nutley 10 NJ (1-6-7)
Emerson Plastics Corporation 1383 Seabury Ave Bronx 61 NY (7)
General Electric Co Insulating Materials Sec Chemical Materials Dept 24 River Rd Schenectady 5 NY (6-7)
●GENERAL ELECTRIC SUPPLY CO 1260 Boston Ave Bridgeport Conn (2-3-5-6-7)—ADV PG 84-85
Goodall Rubber Co 493 Whitehead Rd Trenton NJ (3-5-7)
●GRAYBAR ELECTRIC CO INC 420 Lexington Ave NY 17 NY (2-3-4-5)—ADV PG 2
Insulation Mfrs Corp 565 W Washington Blvd Chicago 6 Ill (3)
Johns-Manville 22 E 40 St New York 16 NY (1 thru 7)
Labelon Corp Canandaigua NY (1)
Linton (Horace) Div Hess Goldsmith & Co Inc 1400 Broadway New York 18 NY (2)
Mica Fabricating Co 53 Central Ave Rochelle Park NJ (2)
Minnesota Mining and Mfg Co Electrical Products Div 900 Bush Ave St Paul 6 Minn (2-5-7)
Minnesota Mining & Mfg Co Irvington Div 900 Bush Ave St Paul Minn (2-5-6-7)
Mitchell Rand Insulation Co 51 Murray St NY 7 NY (1 thru 7)
Mystik Adhesive Products Inc 2635 N Kildare Ave Chicago 39 Ill (2-4-5)
National Electric Coil Div McGraw-Edison Co 800 King Avenue Columbus 16 Ohio (2-6)
Permacel US Highway 1 New Brunswick NJ (1-2-4-7)
Peters Mfg Co 162 Old Colony Ave Wollaston 70 Mass (2-5)
Plymouth Rubber Co Inc 23 Revere St Canton Mass (2-3-4-5-7-8-9)
Polyken Sales Div Kendall Co 309 W Jackson Blvd Chicago 6 Ill (4-7)
Polymer Corp 2120 Fairmont Ave Reading Pa (2-7)
Raybestos-Manhattan Inc 61 Willett St Passaic NJ (5-7)
Ruberoid Co 500 Fifth Ave New York 36 NY (3)
Shuford Mills Inc P O Drawer 340 Hickory NC (2-4-7)
Superior Insulation Tape Co 3100 Lambdin Ave St Louis 15 Mo (3-5-7)
Topflight Corp 160 E 9th Ave York Pa (1-2)
United States Rubber Co 1230 Avenue of the Americas New York 20 NY (2-3-4-5-6-7)
Westinghouse Electric Corp P O Box 2278 Pittsburgh 30 Pa (2-6)

12S. TAPE—WOVEN & OTHERS

1. **Asbestos**
2. **Cellulose acetate**
3. **Cotton**
4. **Crepe paper**
5. **Polyester**
6. **Polyethlene**
7. **Glass fiber**
8. **Silicone**

Anchor Packing Co 401 N Broad St Philadelphia 8 Pa (1)
Atlas Asbestos Co 423 Walnut St North Wales Pa (1-7)
Auburn Mfg Co Pease Ave & Stack St Middletown Conn (1-6-8)
Bishop Mfg Corp 10 Canfield Rd Cedar Grove NJ (6)
Brand Dielectrics 902 Main St Willimantic Conn (7-8)
Chase & Sons Inc 26 Spruce St North Quincy Mass (1-2-3-6-7-8)
Clifton Mfg Co Inc 34 Topalian St Mattapan Boston 26 Mass (7-8)
Connecticut Hard Rubber Co 407 East St New Haven 9 Conn (8)
Continental-Diamond Fibre Newark Del (1-5-7-8)
Electro-Technical Products Div Sun Chemical Corp 112 E Centre St Nutley 10 NJ (1-5-8)
General Electric Co Insulating Materials Sec Chemical Materials Dept 24 River Rd Schenectady 5 NY (6-8)
Insulation Mfrs Corp 565 W Washington Blvd Chicago 6 Ill (1-3)
Johns-Manville 22 E 40 St New York 16 NY (1)
Keasbey & Mattison Co Butler Ave Ambler Pa (1)
Minnesota Mining & Mfg Co Irvington Div 900 Bush Ave St Paul Minn (1-3 thru 8)
Mitchell Rand Insulation Co 51 Murray St NY 7 NY (1 thru 4)
National Electric Coil Div McGraw-Edison Co 800 King Avenue Columbus 16 Ohio (7-8)
Natvar Corp 211 Randolph Ave Woodbridge NJ (7-8)
Permacel US Highway 1 New Brunswick NJ (2-3-4-5-6-7-8)
Peters Mfg Co 162 Old Colony Ave Wollaston 70 Mass (4-5-8)
Polyken Sales Div Kendall Co 309 W Jackson Blvd Chicago 6 Ill (6-7-8)
Raybestos-Manhattan Inc 61 Willett St Passaic NJ (1)
United States Rubber Co 1230 Avenue of the Americas New York 20 NY (1)
Varflex Corp 508 W Court St Rome NY (5-6-7)
Westinghouse Electric Corp P O Box 2278 Pittsburgh 30 Pa (1-3-7-8)

12T. FLEXIBLE SLEEVING & TUBING

1. **Cotton**
2. **Silicone**
3. **Plastic**
4. **Rubber**
5. **Fiber**
6. **Asbestos**

Allegheny Plastics Inc Rt 51 & Thorn Run Rd Corapolis Pa (3)
Alpha Wire Corp 200 Varick St New York 14 NY (2-3-4-5)
Atlas Asbestos Co 423 Walnut St North Wales Pa (6)
Automatic Vulcanizers Corp 16 Hudson St New York 13 NY (4)
Brand (William)-Rex Div American Enka Corp 31 Sudbury Rd Concord Mass (1-2-3)
Continental-Diamond Fibre Newark Del (2-3-5)
Electra Insulation Corp 33-30 57th St Woodside 77 NY (5)
Emerson Plastics Corp 1383 Seabury Ave Bronx 61 NY (3)
Goodall Rubber Co 493 Whitehead Rd Trenton NJ (3-4)
Hewitt-Robins 666 Glenbrook Rd Stamford Conn (1-4)
Hitemp Wires Co 1200 Shames Dr Westbury NY (3)
Illumitronic Engineering Corp 680 E Taylor Ave Sunnyvale Calif (3)
Insulation Mfrs Corp 565 W Washington Blvd Chicago 6 Ill (1-2)
Johns-Manville 22 E 40 St New York 16 NY (6)
Keasbey & Mattison Co Butler Ave Ambler Pa (6)
Kirel Inc Box 459A RFD 1 Kingston NY (2)
Minnesota Mining & Mfg Co Irvington Div 900 Bush Ave St Paul Minn (1 thru 5)
Mitchell Rand Insulation Co 51 Murray St NY 7 NY (1-2-5)
National Electric Coil Div McGraw-Edison Co 800 King Avenue Columbus 16 Ohio (1-2)
Natvar Corp 211 Randolph Ave Woodbridge NJ (2-3)
Permacel US Highway 1 New Brunswick NJ (3)
Polymer Corp 2120 Fairmont Ave Reading Pa (3)
Saylor Electric Products Corp 277 Pierce St Birmingham Mich (1-3-5)
Snyder (M L) & Son Inc 1897 E York St Phila 25 Pa (3-4)

Stone Paper Tube Co 900 Franklin St NE Washington 17 DC (3-5)
Suflex Corp 33-40 57th St Woodside 77 NY (1-2-3-4)
United States Rubber Co 1230 Avenue of the Americas New York 20 NY (3-4)
Varflex Corp 508 W Court St Rome NY (1 thru 5)
Westline Products Div Western Lithograph Co 600 E Second St Los Angeles 54 Calif (3)
Wilmington Fibre Specialty Co New Castle Del (5)

12U. INSULATING MATERIALS—MISCELLANEOUS

1. **Beads**
2. **Cable wrapping**
3. **Cement**
4. **Fused quartz**
5. **Insulating compounds**
6. **Varnished canvas (duck cloth)**
7. **Insulating paint**
8. **Porcelain insulating products**
9. **Slate**
10. **Switchboard mats**
11. **Varnish**
12. **Asbestos, ebony & soapstone**
13. **Insulating paper & cloth**
14. **Motor encapsulating kits**

All-State Welding Alloys Co Inc 249-55 Ferris Ave White Plains NY (5)
American Products Mfg Co Inc 8127-33 Oleander St New Orleans 18 La (5)
Aries Laboratories Inc 45-33 Davis St Long Island City 1 NY (5)
Atlas Asbestos Co 423 Walnut St North Wales Pa (3)
Automatic Vulcanizers Corp 16 Hudson St New York 13 NY (5)
Barrett Varnish Co 1532 S 50th St Cicero 50 Ill (3-7-11)
Bios Laboratories Inc 17 W 60 St New York 23 NY (3-5-7-11)
Blackburn (Jasper) Corp 1525 Woodson Rd St Louis 14 Mo (5)
Borthig (George C) Co Inc P O Box 115 East Rutherford NJ (3-5-7-11)
Brand Dielectrics 902 Main St Willimantic Conn (2-6)
Central Scientific Co 1700 Irving Pk Rd Chicago 13 Ill (3)
Connecticut Hard Rubber Co 407 East St New Haven 9 Conn (3)
Cook's Sons (Adam) Inc 5 N Stiles St Linden NJ (5)
Cottrell Paper Co Inc 10 Purchase St Fall River Mass (12)
Delta Chemical Works Inc 23 W 60 St New York 23 NY (3-5-7-11)
Dolph (John C) Co Monmouth Junction NJ (5-11)
Dow Corning Corp Midland Mich (5-11-14)
Eagle-Picher Co American Building Cincinnati 1 Ohio (3-5)
Electro-Technical Products Div Sun Chemical Corp 113 E Centre St Nutley 10 NJ (6)
Engelhard Industries Inc 113 Astor St Newark 5 NJ (4)
G & W Electric Specialty Co 3500 W 127 St Blue Island Ill (5)
General Electric Co Chemical & Metallurgical Div Silicone Products Dept Waterford NY (5-11)
General Electric Co Insulating Materials Sec Chemical Materials Dept 24 River Rd Schenectady 5 NY (3-5-6-7-11)
Goodrich (B F) Chemical Co 3135 Euclid Ave Cleveland 15 Ohio (5)
Hardman (H V) Co Inc 571 Cortlandt St Belleville 9 NJ (5)
Hubbard & Co 6301 Butler St Pittsburgh 1 Pa (8)
I-T-E Circuit Breaker Co 1900 Hamilton St Philadelphia 30 Pa (8)
I-T-E Circuit Breaker Co Victor Insulators Div Victor NY (8)
Illinois Edison Porcelain McGraw-Edison Co 510 N Pearl St Macomb Ill (8)
Illumitronic Engineering Corp 680 E Taylor Ave Sunnyvale Calif (2)
Induction Heating Corp 181 Wythe Ave Brooklyn 11 NY (5)
Isolantite Mfg Corp Stirling NJ (1-12)
Johns-Manville 22 E 40 St New York 16 NY (3-5-12)
Joy Mfg Co Electrical Products Div 1201 Macklind Ave St Louis 10 Mo (5)
Keasbey & Mattison Co Butler Ave Ambler Pa (12)
Lapp Insulator Co Inc 35 Gilbert St Leroy NY (8)
Lastik Paint Inc 200 S Craig St (Suite 406) Pittsburgh 13 Pa (11)
Lint (Clyde W) 2323 W 18 St Chicago 8 Ill (8)
Martindale Electric Co 1383 Hird Ave Cleveland 7 Ohio (1-3)
Maryland Lava Co Box 127 Bel Air Md (12)
Midland Industrial Div Harrison Paint & Varnish Co 1329 Harrison Ave SW Canton 1 Ohio (7)
●MINERALLAC ELECTRIC CO 25 N Peoria St Chicago 7 Ill (5)—ADV PG 108
Minnesota Mining and Mfg Co Electrical Products Div 900 Bush Ave St Paul 6 Minn (5)
Minnesota Mining & Mfg Co Irvington Div 900 Bush Ave St Paul Minn (2-6-7-11)
Mitchell Rand Insulation Co 51 Murray St NY 7 NY (5-6-7-11)
National Electric Coil Div McGraw-Edison Co 800 King Ave Columbus 16 Ohio (6)
Natvar Corp 211 Randolph Ave Woodbridge NJ (6)
New Jersey Porcelain Co Inc Plum St & NY Ave (P O Box 908) Trenton 5 NJ (8)
●PLM PRODUCTS INC 3871 W 150 St Cleveland 11 Ohio (5)—ADV PG 102
Permacel US Highway 1 New Brunswick NJ (5-11)
Peters Mfg Co 162 Old Colony Ave Woolaston 70 Mass (5)
Plymouth Rubber Co Inc 23 Revere St Canton Mass (5)
Porcelain Products Co 224 N Patterson St Carey Ohio (8)
Portland-Monson Slate Co 465 Congress St Portland 3 Me (9)
Pyrosil Inc 1889 Front St Cuyahoga Falls Ohio (4)
Quigley Co Inc 415 Madison Ave New York 17 NY (3-7)
Raybestos-Manhattan Inc 61 Willett St Passaic NJ (10)
Ruberoid Co 500 Fifth Ave New York 36 NY (3)
Rusgreen Mfg Co 14262 Birwood Ave Detroit 38 Mich (5)
Sauereisen Cements Co 1045 N Canal St Pittsburgh 15 Pa (3-5-7)
Saxonburg Ceramics Inc P O Box 157 Saxonburg Pa (1-8)
Schenectady Varnish Co Inc Congress & 9th Sts Schenectady 1 NY (5-11)
Seton Name Plate Co Inc 50 Fitch St New Haven 15 Conn (12)
Sherwin-Williams Co 101 Prospect Ave NW Cleveland 1 Ohio (5-7-11)
Standard Asbestos Mfg Co 860 W Evergreen Ave Chicago 22 Ill (3-13)
Star Porcelain Co Muirhead Ave Trenton 9 NJ (1-8)
Thermal American Fused Quartz Co 18 Salem St Dover NJ (4)
Union Carbide Corp Silicones Div 30 E 42 St New York 17 NY (5-11)
United States Rubber Co 1230 Avenue of the Americas New York 20 NY (10)
Wilbur & Williams Co Inc 650 Pleasant St Norwood Mass (7)
Zippertubing Co 752 S San Pedro Los Angeles 14 Calif (2)

12V. EXPENDABLE SUPPLIES, MISCELLANEOUS

1. **Armature banding**
2. **Banding & lacing twine**
3. **Beeswax**
4. **Cleaning compound**
5. **Commutator cement**
6. **Flux & paste**
7. **Impregnating compound**
8. **Rust & corrosion preventives**
9. **Slot wedges & sticks**
10. **Solder**
11. **Wire-stripping and pulling compounds**
12. **Wire & cable tags & markers**
13. **Controller contacts & fingers**
14. **Heat-conducting compounds**
15. **Solenoid & magnet coils**
16. **Cable sealing compound**
17. **Wood preservative**
18. **Thread lubricant**
19. **Brazing alloys**
20. **Graphite & electrodes**

Insulation and tape are listed individually under 12Q, R, S, T and U in this section.

All-State Welding Alloys Co Inc 249-55 Ferris Ave White Plains NY (6-10-19)
Allen (L B) Co Inc 5624 N Newark at Bryn Mawr Chicago 31 Ill (6-10)
Alpha Metals Inc 60C Water St. Jersey City 4 NJ (6-10)
American Products Mfg Co Inc 8127-33 Oleander St New Orleans 18 La (7)
American Silver Co Inc Industrial Div 36-07 Prince St Flushing 54 NY (6)
American Solder & Flux Co 19th & Willard Sts Phila 40 Pa (6-8)
Anaconda Wire & Cable Co 25 Broadway New York 4 NY (12)
Anchor Metal Co Inc 966 Meeker Ave Brooklyn 22 NY (6-10)
Arsco Mfg & Sales Corp 438 Tenth Ave New York 1 NY (8)
Automatic Vulcanizers Corp 16 Hudson St New York 13 NY (7-8)
Becker Bros Carbon Co 3450 So Laramie Ave Cicero 50 Ill (20)
Benson (Alexander R) Co Inc 2 Davis Rd New Hartford NY (6-10)
Berry (William B) Co 117 Causeway St Boston 14 Mass (12)
Bios Laboratories Inc 17 W 60 St New York 23 NY (3-4-6-7-8-9-10)
Brady (W H) Co 727 W Glendale Ave Milwaukee 9 Wis (12)
Brand (William)-Rex Div American Enka Corp 31 Sudbury Rd Concord Mass (12)
Bryant Mfg Co 410 N Paulina St Chicago 22 Ill (12)
Burnley Battery & Mfg Corp 103 Clay St (P O Box 511) North East Pa (6)
Cable Electric Products Inc 234 Daboll St Providence 7 RI (6-10)
Cannon Electric Co 3208 Humboldt St Los Angeles 31 Calif (15)
Carboline Co 32 Hanley Industrial Ct St Louis 17 Mo (8)
Carbolineum Wood Preserving Co 6683 N 40 St Milwaukee 9 Wis (8-17)
Chapin (Chas E) Co Inc 227 Fulton St New York 7 NY (13)
Chemalloy Electronics Corp Gillespie Field Santee Calif (10)
Cook's Sons (Adam) Inc 5 N Stiles St Linden NJ (11)
Cool-Amp Co 8603 W 17 Ave Portland 19 Ore (14)
Crown Industrial Products Co 713 Amsterdam St Woodstock Ill (8)
Delta Chemical Works Inc 23 W 60 St New York 23 NY (3-4-6-7-8-10)
Division Lead Co 7742 W 61st Place Summit Ill (6-10-11)
Dow Corning Corp Midland Mich (7-8)
Dunton (M W) Co 350 Kinsley Ave Providence RI (6-10)
Eagle Electric Mfg Co Inc 23-10 Bridge Plaza South Long Island City 1 NY (6)
Early (Edward E) Co 1129 5th St N W Canton 3 Ohio (5)
Electrical Fittings Corp 37-50 57th St Woodside 77 NY (11)
Electrical Windings Inc 2015 N Kolmar Ave Chicago 39 Ill (15)
●ELECTRO COMPOUND CO 4145 W 150 St (P O Box 2772) Cleveland 11 Ohio (11, 18)—ADV PG 122
Engelhard Industries Inc 113 Astor St Newark 5 NJ (6-10)
Farrelloy Co 1245 N 26th St Phila 21 Pa (6-8-10)
Federated Metals Div American Smelting & Refining Co 120 Broadway New York 5 NY (6-10)
Fidelity Chemical Products Corp 470 Frelinghuysen Ave Newark 12 NJ (4-8-11)
General Electric Co Chemical & Metallurgical Div Silicone Products Dept Waterford NY (7)
Glastic Corp 4321 Glenridge Rd Cleveland 21 Ohio (9)
Hardman (H V) Co Inc 571 Cortlandt St Belleville 9 NJ (7)
Ideal Industries Inc 5136 Park Ave Sycamore Ill (5-11)
Insulation Mfrs Corp 565 W Washington Blvd Chicago 6 Ill (2-9)
Johns-Manville 22 E 40 St New York 16 NY (8-19)
Johnson Mfg Co Inc 600 Anamosa Rd Mt Vernon Iowa (6-10)
Johnston Foil Mfg Co 6106 S Broadway St. Louis 11 Mo (10)
Jordan Co 51st & Merrimac Ave Chicago 38 Ill (6)
Kester Solder Co 4201 Wrightwood Ave Chicago 39 Illinois (6-10)
Keyes-Davis Co 89 14th St Battle Creek Mich (12)
Lenk Mfg Co Franklin Ky (6-10)
Lint (Clyde W) 2323 W 18 St Chicago 8 Ill (11)
London Chemical Co Inc 1535 N 31 Ave Melrose Park Ill (6-11)
Ludlow Mfg & Sales Co P O Box 101 Needham Heights 94 Mass (2)
Lukens (Thos F) Metal Co Hedley & Bath Sts Philadelphia 37 Pa (6-10)
Martindale Electric Co 1383 Hird Ave Cleveland 7 Ohio (5)
Metal & Thermit Corp Rahway NJ (8)
Mico Instrument Co 80 Trowbridge St Cambridge 38 Mass (6-10)
Midland Industrial Div Harrison Paint & Varnish Co 1329 Harrison Ave S W Canton 1 Ohio (8)
●MINERALLAC ELECTRIC CO 25 N Peoria St Chicago 7 Ill (11)—ADV PG 108
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National Band & Tag Co 721 York St Newport Ky (12)
National Electric Coil Div McGraw-Edison Co 800 King Ave Columbus 16 Ohio (1-2-7-9-10)
National Lead Co 111 Broadway NY 6 NY (6-10)
North Shore Nameplate Div Anodyne Inc 1270 N W 165 St North Miami Beach Fla (12)
Northwoods Mfg Chemists Inc Porterfield Wis (4)
Okun (A L) Co Inc 109-02 Van Wyck Expressway South Ozone Park NY (10)
Page Steel & Wire Div American Chain & Cable Co Inc P O Box 692 Monessen Pa (1)
Penetone Co 74 Hudson Ave Tenafly NJ (4-8)
Penn Fibre & Specialty Co Inc 2024 E Westmoreland St Phila 34 Pa (12)
Permacel U S Highway 1 New Brunswick NJ (4-7)
Plymouth Rubber Co Inc 23 Revere St Canton Mass (18)
Porcelain Products Co 224 N Patterson St Carey Ohio (10)
Premex Products Div Chisholm-Ryder Co Inc College & Highland Aves Niagara Falls NY (12)
River Smelting & Refining Co 4195 Bradley Rd (P O Box 5755) Cleveland 1 Ohio (10)

Ruby Chemical Co 68-70 McDowell St (P O Box 1108) Columbus 16 Ohio (6-10)
Rust-Oleum Corp 2425 Oakton St Evanston Ill (8)
Sherwin-Williams Co 101 Prospect Ave N W Cleveland 1 Ohio (7)
Silicone Insulation Inc 1383 Seabury Ave Bronx 61 NY (9)
Sittler Corp 18 N Ada St Chicago 7 Ill (5)
Smith Welding Equipment Corp 2633 4th St S E Minneapolis 14 Minn (6)
Stackpole Carbon Co Stackpole St St Marys Pa (13)
Subox Inc Fairmont Plant Hackensack NJ (8)
Sulfo Inc 1143 E Jersey St Elizabeth 4 NJ (8)
Superior Carbon Products Co 9115 George Ave Cleveland 5 Ohio (13)
Thermon Mfg Co 1017 Rosine St Houston Tex (14)
Turco Products Inc 24600 S Main St Wilmington Calif (4-8)
Union Carbide Corp Silicones Div 30 E 42 St New York 17 NY (7-16)
United Wire & Supply Corp 1497 Elmwood Ave Providence 7 RI (6-10)
Waveland Electric Co 5542 N Ashland Ave Chicago 40 Ill (4-5-8-13)
Westinghouse Electric Corp P O Box 2278 Pittsburgh 30 Pa (13)
Westline Products Div Western Lithograph Co 600 E Second St Los Angeles 54 Calif (12)
Wilbur & Williams Co Inc 650 Pleasant St Norwood Mass (8)
Wilmington Fibre Specialty Co New Castle Del (9)
Zippertubing Mfg Co 13000 S Broadway Los Angeles 61 Calif (12)

12W. PERSONNEL PROTECTIVE EQUIPMENT

1. Clothing
2. Eyeshields & goggles
3. Face shields & masks
4. Respirators

Charleston Rubber Co Stark Industrial Park Charleston SC (1)
DeVilbiss Co 300 Phillips Ave Toledo 1 Ohio (4)
Dockson Corp 3839 Wabash Ave Detroit 8 Mich (2-3-4)
General Scientific Equipment Co Limekiln Pike & Williams Ave Philadelphia 50 Pa (1-2-3-4)
Kedman Co 233 S Fifth West St Salt Lake City Utah (3)
Lincoln Electric Co 22801 St Clair Ave Cleveland 17 Ohio (2-3)
Martindale Electric Co 1383 Hird Ave Cleveland 7 Ohio (2-3-4)
Mine Safety Appliances Co 201 N Braddock Ave Pittsburgh 8 Pa (2-3-4)
Schauer Mfg Corp 4500 Alpine Ave Cincinnati 42 Ohio (2)
Smith Welding Equipment Corp 2633 4th St S E Minneapolis 14 Minn (2)
Snyder (M L) & Son Inc 1897 E York St Phila 25 Pa (1)
Standard Portable Cord Co Inc Mayville NY (2)

12X. MATERIAL PRICING SERVICE

Complete pricing information on all types of electrical equipment.

Biddle Trade Publishing Co 2720 Beverly Blvd Los Angeles 57 Calif
Henderson-Hazel Corp 13601 Euclid Ave Cleveland 12 Ohio
Trade Service Publications Inc 341 E Ohio St Chicago 11 Ill

TECHNICAL LITERATURE

To obtain the following literature, enter the appropriate Code Numbers* on the Free Information cards elsewhere in this issue.

*Code No.	Description, Pages Catalog No. & Mfr.
12-1	Brazing Manual; 24p; Cat. No. 5260 (All-State)
12-2	Welding Instruction Manual; 55p; Cat. No. 9160 (All-State)
12-3	Coil Winding Study; 24p (Associated American)
12-4	Tree Trimming Equipment and Metal Cutting Shears; 32p; Cat. No. 40 (Bartlett)
12-5	Carbon Products for Welding; 38p (Becker)
12-6	Carbon Brushes; 48p; Cat. No. 60-S-1 (Becker)
12-7	Tool Brushes; 48p (Carbon Engineering)
12-8	Carbon Brushes; 85p; Cat. No. 60 (Carbon Engineering)
12-9	Pole Line Hand Tools; 24p; Cat. No. 7e (Chance)
12-10	Industrial Blowers and Vacuum Cleaners 36p (Clements)
12-11	Fasteners for Masonry and Hollow Walls; 48p; Cat. No. 160 (Diamond Expansion)
12-12	Principles & Practices of Resistance Welding 27p; Cat. No. PP-60 (Federal Machine)
12-13	Installation Aids, Outside Telephone Plant; 60p; Cat. No. T-4-60 (General Cable)
12-14	Time Saving Tools; 39p; Cat. No. 37E (Greenlee)
12-15	Electrical Tools; 56p; Cat. No. 1961 (Hunter)
12-16	Wire Connectors, Electrician's Tools and Electrical Specialties; 18p (Ideal)
12-17	Welding Equipment & Supplies; 39p; Cat. No. 7000.7 (Lincoln)
12-18	Manual of Pressure Sensitive Products; 56p (Mystik)
12-19	Ball-Bearing Design Purchasing Manual; 117p (New Hampshire)
12-20	Adhesive Labels; 24p (North Shore)
12-21	Floor Trucks; 36p; Cat. No. 50-A (Orangeville)
12-22	Steel Shelving; 34p; Cat. No. 2400 (Penco)
12-23	Hand Tools; 76p; Cat. No. 6020 (Proto)
12-24	Signs and Nameplates; 100p; Cat. No. 46 (Spencer)
12-25	Splicing, Terminating and Repair Kit; 8p (Bishop)
12-26	Masonry Anchoring Handbook; 48p; Cat. No. 25 (Rawlplug)

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July, 1960 through June, 1961

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Where an item or article is concerned with more than one main subject, it is indexed under each.

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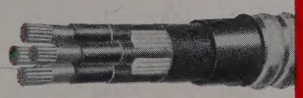

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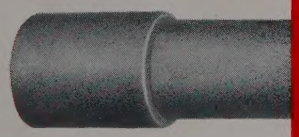

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